

Food Sovereignty: A Critical Case

By
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Abstract

For decades, the global food security strategy has operated on the assumption that poverty and hunger result from a state of underdevelopment, which can be alleviated through the distribution of technology to increase farm-level productivity. In more recent years, transnational corporate involvement within food security has led to a global imposition of intellectual property rights over seed and agriculture science, thus catalyzing a process of accumulation by dispossession. Those who have been dispossessed of their seed, knowledge, food cultures, and social relations of production, however, have not stood idly by. NGO, peasant and human rights organizations have galvanized around food sovereignty, a radical-rights based alternative to the business as usual approach of food security. Broadly defined, food sovereignty is the peoples' right to define their own food and agriculture systems. It has also been described as 'repossessing the commons', or taking back those aspects of life, like seed, which have been commodified through corporate/neoliberal projects. One fall back to this approach, is that it does not address the crucial difference between having a right and doing what is right. The thesis explores this topic by reviewing the meaning of rights for both food security and food sovereignty. Then, using Robert Sack's theoretical framework, the thesis suggests that we may use intrinsic geographic judgments to know whether the rights we promote actually lead to intrinsic progress, or a heightened awareness of the real and the good. Lastly, an empirical case study in Guatemala is explored to reveal how the power of place affects the sort of progress food sovereignty can achieve.

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Chapter 1: Introduction

At a time when seed's natural ability to reproduce is seen as an impediment to the alleviation of poverty and hunger, it is worth asking whether we are headed in the right direction when it comes to food and agriculture. Food security has long been the framework used by U.S. food and agriculture policies, as well as international aid, and private companies, involved with distributing resources to food insecure regions of the world. Megan Carney explains that when the concept of food security emerged at the first World Food Conference in 1974, it attributed poverty and hunger to problems of underproduction and outdated farming practices, thus ushering in the era Green Revolution technologies (Carney, 2009). Several decades later, food security still attributes poverty and hunger to underdevelopment, but the focus has shifted from artificially boosting raw yields and basic calories, to increasing "access to nutritionally adequate and culturally appropriate foods" (Carney, 2009, p.83). These two perspectives, while focusing on different ends of food security, reduce poverty and hunger to superficial problems of insufficient trade "by prioritizing *access* to food rather than *control* over systems of production and consumption" (Wittman, 2011, p. 91).

Peter Rosset observes that since the Green Revolution, three decades of neo-liberal privatization and free trade agreements have dismantled the national food production capacity of most countries around the world, replacing it with an artificial capacity, maintained by government subsidies to agribusiness, to produce agro-exports (Rosset, 2008). At the same time, the World Bank (WB) and the International Monetary Fund (IMF) have engineered greater demands for cheap food imports by forcing governments to end public sector grain reserves, as well as minimum price guarantees, credit, technical assistance and national markets for smallholder family

farmers (Rosset, 2006). Food security presents major issues to achieving meaningful progress because conventional understandings of ‘security’, as Rob White discusses, are rooted in conceptions which “reflect militarized notions of security, rather than those premised upon either universal human interests or the intrinsic worth of animals, plants and specific eco-systems” (White, 2014, p.840). Food security, in other words, represents an implicit goal of powerful countries to stave off conflict in developing regions of the world, in order to maintain control over economic systems of resource extraction and export-oriented production. Indeed, many authors, non-governmental, indigenous and grassroots organizations have discarded the shallow goal of food security altogether, replacing it with a deeper and certainly more radical goal, food sovereignty.

The international peasant organization La Via Campesina, representing 148 organizations from 69 countries (Foran, 2014), brought the concept of food sovereignty to the world’s attention during the World Food Summit in 1996. Food sovereignty promises an alternative to the neo-liberal model of food security by prioritizing and protecting local agricultural production, the right of farmers to control what they produce, the right of consumers to decide what they consume, and the right of countries to protect themselves from dumping vis-à-vis third countries (La Via Campesina, 2003). Wittman describes food sovereignty “not as an established paradigm/concept but rather a potential new framework emerging from a diverse set of contemporary grassroots production practices and political approaches” (Wittman, 2011, p.89). This framework, McMichael suggests, involves a tension between abstract globalism i.e., “food from nowhere” and concrete localism i.e., “food from somewhere” (McMichael, 2016, p.649), with the goal, as Alana Mann writes, of “re-centering agriculture as part of a larger project against the destructive imposition of market relations and commodification on every aspect of life” (Mann, 2014, p.3).

Jack Kloppenburg describes the work towards this goal as ‘repossession of the commons’ (Kloppenburg, 2010), resisting the commodification of knowledge and seed in agriculture. As Eric Holt-Giménez explains, knowledge “is a reflection of a set of social relations revolving around different forms of the commons” (Holt-Giménez, 2006, p.97). When farmers share local varieties of maize or beans, for example, they not only exchange a material resource i.e., the seed, they also exchange vital information and knowledge about how to cultivate the seeds being shared, where to plant, under what conditions, and using which techniques. Sharing of labor, knowledge and seed is done carefully and consciously to help smallholders “cope individually and collectively with the risks inherent in farming” (Holt-Giménez, 2006, p.97). Unfortunately, through the imposition of intellectual property rights (IPRs), and other plant variety protections (PVPs), which restrict the free and open exchange of seed and knowledge, much control has been lost over the means of producing and reproducing the commons. Put simply, “who controls the seed gains a substantial measure of control over the shape of the entire food system” (Kloppenburg, 2010, p.368). Therefore, the alternative offered by food sovereignty to the neo-liberal model of food security can be described as an alternative rights-based framework, where the right of peoples to define their own food and agriculture systems is held paramount.

Of course, rights-based language is nothing new when it comes to addressing poverty and hunger. A key difference between the rights promoted by food security and those promoted food sovereignty, however, is that the former is an example of *negative* rights, whereas the latter is an example of *positive* rights. In other words, food security promises the right to be free *from* something, such as hunger and malnutrition, while food sovereignty promises the right *to* have rights (Arendt, 1967), or more specifically, the right to have rights over food (Patel, 2009). Food sovereignty writers and activists, like Raj Patel, focus on the meaning of rights because to make

the right to define food and agriculture systems meaningful “is to require that everyone be able substantively to engage with those policies” (Patel, 2009, p.670). In a society with deep structural inequalities, especially within the international economic system, however, rights tend to privilege some individuals and groups at the expense of others. Therefore, in order to make food sovereignty meaningful, “the rights-based approach must be able to attack and change these structures” (Mowbray, 2007, p.548) In this way, while the goal of food sovereignty is certainly to protect and promote the right to have rights over food, this goal is preceded by the need to address society’s base inequalities of power, and to make progress towards a radical ‘moral universalism’ (Patel, 2009). This last point, the connection between moral progress and meaningful rights, is one which has received the least attention thus far in food sovereignty literature. Without a clear understanding of where our rights are taking us, however, it is unlikely that food sovereignty will move us in any better a direction than the neo-liberal approach to food security.

Professional and academic fields, such as planning, which often face normative ethical dilemmas in practice (Harper & Stein, 1992), express a similar concern, that the conventional liberal philosophy surrounding individual rights derives from, and perpetuates, “a basic agnosticism concerning conceptions of the good” (Anderson, 1987, p.27; cited by Cambell and Marshall, 2012). Within the material reality of planning activities, such as the development of food plans, Campbell and Marshall argue that simply remaining agnostic about the good, and focusing instead on protecting the right of individuals and communities to pursue their own self-interest, is more likely to paralyze our projects than it is to help us achieve collective goals (Campbell & Marshall, 2012). Worse yet, it leaves us without a clear moral picture of where we are going. As a result, emerging rights-based frameworks, like food sovereignty, are at risk of paralyzing their

own goals if they do not take seriously the moral foundation of the rights they wish to promote. A more radical view, situated in the reality of place, might help to ensure that this does not happen.

The essential point of the thesis is that rights have a geographic basis. The right to something must take place somewhere, but if an individual or community is trying to exercise the right to food sovereignty in a region which is overrun by monoculture crops, genetically modified seed and export-oriented agriculture, it is unlikely that they will be able to exercise their right to its fullest extent. In the same way, the individual or community exercising the right to define their own food and agriculture system is, in effect, transforming the place in which they live into the type of place they think it *ought* to be. This is an inherently moral process, which stems from our geographic condition, or “the fact that we cannot accept reality as it is and so we create places to transform reality into what we think it ought to be and then transform this new reality, and on and on” (Sack, 2001a, p.107). Food sovereignty involves the transformation of reality so that people may exercise their right over food and agriculture. People make places for food sovereignty, not simply because they believe it creates more logical, sustainable, and fair food systems, but because they believe that these are the types of places we ought to have. Therefore, exercising the right to food sovereignty involves making places and moral decisions with an implicit geographic basis.

Sack explains that when we create places, “delimited and controlled areas of space that contain rules about what may or may not take place” (Sack, 2002, p.114), we manifest the intimate relationship that geography shares between the real and the good. The places we create contribute to the real in terms of adding to, subtracting from, or transforming what was already there (Sack, 2002). Certain places also contribute to the good, such as community shelters, public libraries, and loving homes. Not all places that contribute to the real, however, also contribute to the good. Human trafficking rings, sweat-shops, political prisons and countless other evil places certainly

affect reality, however, they detract from the good. Geography's relationship between the real and the good is also manifested through our awareness. When place helps us to see reality more clearly, we become more aware of our own geographical agency and how it contributes to, or detracts from, the good. This is crucial, Sack writes, "Because our degree of awareness of the real affects how we contribute to reality" (Sack, 2002, p.114). When we are less aware, when we see less clearly how our actions affect other people, places and environments, we tend to contribute to reality in ways that detract from the good, and perhaps in ways that we did not expect, because we were unaware. Therefore, Sack argues that an essential element of moral progress is moving towards the real and the good by creating places "that increase our capacities to see reality more clearly and that increase the variety and complexity of that reality" (Sack, 2001b, p.117). Within this framework, our rights are not curtailed. Rather, they given guidance as to the direction they ought to be taking us. Applied to food sovereignty, Sack's moral geographic framework would help to ensure that as communities exercise their right over food and agriculture systems, they do so in ways which help to enrich rather than impoverish reality, thus setting themselves, and the places they are connected to, on a path toward intrinsic geographic progress, which food security fails to achieve.

In Chapter 2, I take a closer look at the instrumental goals of what is often called the Global Food Security Strategy (GFSS). In particular, I examine the ways in which poverty and hunger are portrayed as consequences of underdevelopment, thus creating the assumption that food security is best achieved through the broad diffusion of improved seed technology to vulnerable groups. In Chapter 3, I explore further the meaning of rights within the framework of food sovereignty. The right to food was recently put to the test by the International Monsanto Tribunal (18 April, 2017), revealing that even when corporations are targeted for human rights violations, there is no

guarantee that the rights they violated will be restored and protected. This begs the question, “Is food sovereignty all about rights?” The answer, as I have already eluded to, is that food sovereignty is as much about exercising moral geographic agency as it is about making the right to food meaningful. I have reserved Chapter 4 to make the case for moral theory in modern society. The prominent planning theorist and researcher, Bent Flyvbjerg, has much to say about the role of value-rationality in planning and democracy today, much of which disagrees with Sack’s argument that an independent and intrinsic good exists. I take this opportunity to address both sides of the argument and to demonstrate that no matter our theoretical position, we all must have an intimation of the good, and that the most reasonable next step is articulate what those intimations are, rather than remaining agnostic about it. In Chapter 5 I move into a full discussion of Sack’s moral geographic theory. Here, I stress the importance of the criteria with which we use to judge places, and how that criteria, either instrumental or intrinsic, informs how the structure and dynamics of place are put to use. Finally, in Chapter 6, I conclude with a case study analysis of a food sovereignty project taking place in the western highlands of Guatemala, in the municipality of San Lucas Tolimán.

The project, *Nutrición Nativa*, is directed by the *Instituto Mesoamericano de Permacultura (IMAP)*, a local, indigenous, non-governmental organization, working to extend more control over native seed to local farming communities while simultaneously addressing high rates of childhood malnutrition. The primary native seed being promoted in this project is amaranth, *amaranto* or *bledo*. This effort at food sovereignty is a place making project with moral implications that play out geographically through the places the project creates. In this chapter, I look at two specific places, IMAP’s permaculture institute, as well as sites of production, to analyze the sort of progress that is being achieved. To help with this analysis, I ask the following value rational questions:

1. Where are we going with planning for food sovereignty in San Lucas Tolimán?
2. How are the mechanics of place used to achieve progress?
3. Is this desirable?
4. What should be done?

Chapter 2: Food Security

For all the effort that has been made to pin-point solutions to food insecurity, little attention has been given to the ways in which solutions are developed or to the values by which they are motivated. In this chapter I will discuss the conventional approach to food-insecurity, which can be summarized as the promotion of increased innovation and diffusion of agricultural technologies. I look at who is involved, how we arrived at this solution, and the mechanisms by which it functions today.

Who is Involved?

On April 29th of 2015, David Lane, the U.S. ambassador to the U.N. agency on Food and Agriculture, in an interview with Rosamond Naylor, the director of the Center on Food Security at Stanford, painted a complex picture of the future of global food-security. By 2050, we will have a population of 9 billion, and we will need to increase agricultural productivity by an estimated 60%, using fewer inputs, with less land, and in the face of climate change (Lane, 2015). Productivity in the form of basic calories, however, is not enough to address the reality of food insecurity. Lane argues that we must make progress in nutrition, which comes from crop diversification and putting women and smallholder farmers at the center of food security strategies. He attributes our overemphasis on production to the goals of the Green Revolution, which taught us to equate progress to low food prices and less GDP going to agricultural labor. Lane believes that this metric of progress has given people a false sense of security when see low prices at the grocery store and less people toiling away on farms. Unfortunately, low food prices and even prosperity in some corners of the globe, does not necessarily mean that we are moving in the right direction, or that hunger and poverty will eventually fade away. The world was made painfully

aware of this reality in 2007 when spikes in global food prices ignited a period of extreme desperation and conflict across the global south (Agarwal, 2014). The Green Revolution might have transformed agricultural production in South East Asia, Central America and Africa. Its short-term success, however, was founded on the broad dissemination and adoption of petrochemical technologies, such as synthetic pesticides and fertilizers, which themselves were subject to severe fluctuations in the global economy (Agarwal, 2014).

Lane believes that we have been given a second chance to once again make agriculture the cornerstone of development in the global south. We must do so sustainably, however, and with small-holders and women at the center of the decision-making process. This belief reflects the vision of former President Obama's Feed the Future Initiative (FTF). FTF is the U.S. government's global hunger and food security initiative. Its mission is based on transforming the global approach to food security by connecting smallholder farmers and women to financial services, private innovators and markets (Progress Report, 2016). In his interview with Dr. Naylor, Lane reports that women agriculturalists are 30% less productive than men due to a gender bias in how technical assistance is administered through international aid programs (Lane, 2015). Considering that women make up over half of the agricultural labor force in many of the countries in which FTF operates, Lane warns that we may be undermining our ability to make a more food secure future. Working with smallholder and women farmers, however, presents new realities, such as limited access to land, degraded soils, limited financial means and discrimination, all of which the global food security strategy has never meaningfully addressed. Therefore, in order to place smallholders and women at the center of the food security initiative, Lane stresses the need for nations to partner with private industries to foster agricultural innovations that will cater to these groups.

One such effort has come in the form of FTF's *Feed the Future Innovation Labs*, which connect twenty-four U.S. led universities to their partner regions in the global south. According to the 2016 FTF Progress Report, Feed the Future Innovation Labs have delivered more than 900 innovations, such as new crop varieties, to help farmers increase yields, fight pests and adapt to changing climatic conditions (Progress Report, 2016). Heat-tolerant maize hybrids are especially popular in Africa and South Asia where FTF has partnered with eleven seed companies and university researchers to make more climate-resilient hybrids available to smallholder farmers (Progress Report, 2016). Therefore, FTF's mission does not stop at the development of new agricultural technologies. A critical second-step to their food security initiative is to increase access to these technologies, like hybrid maize, to smallholder farmers who are most vulnerable of the effects of climate change.

FTF works as network, with eleven other U.S. Government departments and agencies managing partnerships and programs between local communities, regional organizations and private seed companies. In Zambia, *Stewards Globe*, a branch of the seed corporation AFRISEED, has expanded their brand of improved legume varieties by establishing growing contracts with small holder farmers. In 2015, *Stewards Globe* led the establishment of demonstration plots for AFRISEED's improved common bean variety, and distributed seed packages to over 60,000 farmers (Innovation Portfolio, 2016). In Ukraine, the agro-technology corporation *Agrico*, has partnered with the Swiss seed giant *Syngenta*, through FTF's *AgTechXChange* program, to organize in-field training exercises with new heat resistant potatoes to replace heirloom varieties (Innovation Portfolio, 2016). And in Guatemala, FTF agencies have partnered *Servicios Post-Cosecha*, a Guatemalan agro-technology corporation, with the International Potato Center to introduce improved varieties of potatoes under the brand name, *Papais* (Innovation Portfolio,

2016). On the surface, the goal of these actors, through their partnerships with one another, is to connect smallholder farmers to the global marketplace, to expand their economic opportunities and increase global food production. Central to these goals, however, is the assumption that private sector innovations are necessary to food security. The two branches of FTF which make this assumption clear are the *Partnering for Innovation* and *AgTechXChange* programs. These two extensions of FTF focus on bringing together companies who wish to commercialize agricultural technologies for smallholder use and developing strategies to connect smallholder farmers to the global marketplace. In other words, they hoped to create a more food secure future by increasing smallholders' access to private-sector innovations.

According to the *AgTechXChange Team*, smallholders and the private sector have a hard time meeting each other half way. Smallholders lack both the purchasing power to afford improved inputs and the technical know-how to successfully apply them. While private businesses see many risks in catering to smallholder clients. This second obstacle is largely a result of the Green Revolution, which established innovation distribution networks designed to service large land holders. Now, however, that the U.S. government has made smallholders and women a central focus of their food-security strategy, *Partnering for Innovation's* Director, Bob Rabatsky asserts that food security strategies must find ways to help the private sector to provide technologies to increase smallholder productivity, while earning a profit (Hamilton, 2016). In other words, they must find a way to entice private sector innovators to invest and take risks in an inherently poor market. This line of thinking assumes not only that the innovation and distribution of improved seed is the best solution to food insecurity, but also that the private sector is best positioned to take on the task. These assumptions are part and parcel of a recurring theme in global south development projects to pursue high-tech cures for hunger and poverty while ignoring far more

realistic and readily available solutions, such as raised fields, polycultures, native seeds and agroforestry systems (Tokar, 2014).

How did we get here?

At the center of any food-security strategy lies an ontological perspective on poverty, an idea of what poverty is, why it exists and how it might be resolved. This is precisely because food insecurity is a state of poverty, or a dimension of deprivation that relates to food and nutrition (FAO, 2008). For this reason, it is important that any critical glance at contemporary food security strategies be accompanied by an effort to understand how the strategy in question perceives poverty. As stated in the introduction, I am focusing on the food security strategy which promotes increased innovation and diffusion of agricultural technologies. And as I have indicated, this is the strategy pursued most earnestly by the United States' Feed the Future Initiative, as well as the United Nation's Food and Agriculture Organization (FAO), which I will demonstrate later in the chapter.

What then is this strategy's perspective on poverty? And in what ways does it affect our efforts to create a more food secure future? Much work has been done to illustrate the genesis of agricultural development over the past half century, from the Green Revolution to the Gene Revolution. Unfortunately, less work has been done to answer these two questions, which expose an underlying issue in the way we define and pursue progress, especially as it is related to food security and poverty. Let us first begin by understanding how food security is framed. The FAO employs a definition of food security derived from the 1996 World Food Summit which states;

Food security exists when all people, at all times have physical and economic access to sufficient, and safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (World Food Summit, 1996)

How this definition works within the right to food framework will soon be discussed. First we must understand the direction that it sends us. Clearly, an important component of food security is improving *food access*. In their 2006 Policy Brief, the FAO discusses increased food access as those steps which improve individuals' access to the necessary resources for sustained food production. These resources can include agricultural inputs, such as improved seeds, fertilizer, pesticide, and infrastructure, such as cold storage facilities, roads and food distribution networks. Food security then relies on places working better together to deliver the means for improved food access. This entails the formulation of new geographies, if you will, that better connect places where agricultural inputs are produced, to places where agricultural inputs are used, and finally, to places where food is purchased or acquired and consumed. And so, places work well when they show progress toward the goal of improved food access. Geographer Robert Sack likens this sort of progress to what he calls *instrumental progress*. The mix of places and the rules by which they are governed, he explains, are instrumental to meeting the goals of the project, but their meaning and purpose does not extend beyond the those goals. We will revisit this point at the end of the section, but to understand its full significance, we will first need to return to the question of poverty.

To say that the food security strategy perceives poverty through a single lens is perhaps too general a claim. After all, food security is an effort pursued by organizations both large and small, public and private, across the globe. It is certainly not my intention to lump more equitable and sustainable approaches to food security with those overtly in favor of purely industrial methods of agricultural production, of which there are plenty. Nevertheless, it is quite clear that the conventional food security strategy is based on an antiquated belief, perhaps best described by the Geographer Lakshman Yapa, "that poverty arises from lack of development or underdevelopment,

a condition that can be eradicated with more development” (Yapa, 1993, pp. 255). Of course, development can take on a variety of forms depending upon the aspect of poverty being addressed. The development of new educational systems differs in appearance and purpose from the development of new health care facilities and both certainly differ from the development of agricultural production. Yapa suggests that while the differences between each form of development are certainly important, they should not distract us from the fact that development typically takes the place of a pre-existing nexus of social relations. Health care development rarely, if ever, occurs in a place where people’s health had not been previously considered and addressed. Just as agricultural development has rarely occurred in places where no prior form of agriculture existed. The point Yapa makes is that development, whether it be the development of health care, education or agriculture, rarely implies the mere enhancement of pre-existing systems or services. Rather, it almost always implies the complete transformation or replacement of an existing process and the social relations upon which that process had previously relied.

In the realm of agriculture, development has often been decried for eroding traditional social relations of production, knowledge-transfer and general awareness of where food comes and how it is grown. The latter of these concerns has been addressed with varying degrees of success by the establishment of fair-trade markets and other measures to increase the transparency of food production. Future agricultural development will likely introduce even more transparency to the marketplace as new traceability technology, such as Syngenta’s *Farmforce* software, makes it easier for smallholder farmers to track, record and make-searchable, information related to the production of their crops, where they were grown, what inputs were used, etc. The assumption remains, however, that new technological development is required to move agrarian communities away from a state of food insecurity and poverty, which brings us to a question concerning the

original goal of the food security strategy. If the goal of food security is to increase food access, and if most actors within the food security strategy perceive poverty and food insecurity as a state of underdevelopment, what then is development supposed to look like, and how exactly does it affect pre-existing networks of agricultural production?

Development, as I have indicated, is very circumstantial and depending on the scale, it can also be very abstract. The development of global, transcontinental and even regional agricultural networks must necessarily include a wide range of geographic scales both physical and social. For this reason, we find that economic models of development are often employed to guide how development is likely to occur given the project and the range of variables and scales involved. In the case of agricultural development, we see that economic models of diffusion were employed during the period of the Green Revolution to explain how hybrid seeds should filter through agrarian communities. Models were produced indicating that farmers, as rational actors, would adopt high-yielding varieties of hybrid seed if provided with sufficient access to capital, information, credit and irrigation technology (Yapa, 1993). The diffusionist paradigm of the Green Revolution posed two significant problems for the existing relations of agricultural production. First, by rationalizing the adoption of hybrid seed, a polarizing language was introduced to agrarian communities whereby those who could more easily adapt to the new technologies came to be known as “progressive farmers”, while those opposed to the use of hybrid seeds and their chemical inputs came to be known as “non-adopters” or “laggard farmers” (Yapa, 1993). Without considering the possible socio-economic and cultural reasons for the non-adoption of hybrid seeds, and by stigmatizing non-adopters for their seemingly irrational opposition to a perfectly “rational” form of development, the diffusionist paradigm created distinct divides in agrarian communities, between those farmers who would ultimately benefit from globalization, and those who would be

left behind. Second, by granting infallible authority to the agro-technological innovations produced in the Global North, the diffusionist paradigm provided little room to critically reflect upon the potential socio-environmental consequences of hybrid seed, synthetic fertilizers and pesticides. Notably, little attention was given to fact that hybrid seeds replaced the former means of seed reproduction by inserting required chemical inputs into the reproduction process. Progressive farmers found little cause to object to the fundamental transformation of seed reproduction because native or non-hybrid crop varieties were quickly declining in market value. While objections from non-adopters went unheeded precisely because the diffusionist paradigm had already delegitimized their opinions in the eyes of those organizations and governments responsible for providing the technical means for agricultural development. As a result, hybrid seeds and chemical inputs opened new global markets for some farmers, they introduced scarcity for others.

Food security strategists have arrived at the conclusion that the Green Revolution did a poor job assuring an equitable diffusion of agro-technologies to smallholder farmers. They contend that pre-existing inequalities within agrarian communities resulted in concentrations of income gains among wealthier farmers who could more easily adopt new technologies. As an example, the FAO refers to a case study from the Philippines which shows that between 1965 and 1980 farmers with access to irrigation, credit and implicit subsidies, benefited greatly from Green Revolution technologies which allowed them to produce high yielding cash crops at increasingly larger scales. This generated income gains for the already-affluent sector of the rural economy. As consumers, this class of the economy preferred imported, capital-intensive goods, over local, labor-intensive goods, thus draining revenue from the poorer sector of the economy (Bautista, 1995). With examples such as this, the FAO suggests that if the gains from advancements in agro-technologies were to be more equitably shared amongst smallholders, more capital would be

invested in the local economy and incomes overall would rise. Notably, this conclusion does not consider that the technology itself might be a contributing factor to the persistence of smallholder poverty. Rather it perpetuates the diffusion paradigm of development which guides most food security strategies today.

This conclusion should not be all too surprising because it reveals that the food security strategy has simply not moved beyond the confines of instrumental progress. As mentioned earlier in the section, instrumental progress implies that the geographies and places of food security projects are judged based on the goals of increased food access which, as I have shown, entail the diffusion of agro-technologies. The places involved in these projects are instrumental to the efficient distribution of new varieties of improved seed and external inputs. There is little indication, however, that these projects are judged for anything beyond the instrumental goal of increasing the distribution and use of new technology. This is potentially very problematic because, as the Green Revolution clearly demonstrated, places can be instrumentally good at meeting their goals, like production or distribution, while also being socially and environmentally disastrous. The following section takes a closer look at the mechanisms by which agro-technology and private sector innovations are being normalized within the contemporary food security strategy.

How does it work?

So far, I have attempted to name the major actors in the global food security strategy. In the second section I showed how their rationality concerning poverty and development is built on the diffusion paradigm of development and a deeply held faith in the untapped potential of agricultural technologies. Referring to previous patterns of establishing food security, I indicated that diffusionism remains the central method of the global food security strategy. I also

noted, however, that the difference between the diffusion of technology today and the diffusion of technology during the Green Revolution is that today's food security actors are focused on helping private sector innovations to reach smallholder and female farmers. In this section I will discuss the role of improved seeds and intellectual property rights in creating this private-industry-friendly environment.

A key position held by the global food security strategy is that private companies need the protection of intellectual property rights (IPRs) in order to compete in the market for improved seed varieties to be used by smallholder farmers. In other words, without IPRs for new plant varieties, there would be little incentive to invest and innovate. This logic bears a more deeply held assumption that capital is a necessary ingredient for agricultural innovation. And while I will not attempt to completely refute this assumption, I do find it troubling that today's dominant food security strategy finds it necessary to provide capital incentive to advance the evolution of seed. If not for the sake of capital accumulation, we ought to ask, why innovate? It would seem as though our civilization's effort to end poverty and food insecurity could be characterized as one of means without ends. We seem to have more knowledge and resources than ever before to act on issues related to poverty and food insecurity, and yet we remain shackled to the rudimentary motivation of capital accumulation. We must move beyond this superficial notion of progress if we truly wish to develop a meaningful solution to food insecurity. Unfortunately, we do not seem to be heading in that direction just yet.

The International Union for the Protection of New Varieties of Plants (UPOV) Act of 1991, signaled an emboldening of intellectual property rights around seed, which is still gaining strength today. UPOV, or the "UPOV convention" as it is often called, was established in 1961 to help its 67 member states spur the development of new plant varieties by granting breeders an intellectual

property right over their seed, known as the “breeder’s right”. The Act of 1991 represents the convention’s third and latest revision to their articles since they were last revised in 1978. This latest revision strengthened plant breeder’s rights by prohibiting farmers from saving protected varieties for their own use without a breeder’s authorization (UPOV, 1991, Article 14.1). Additionally, breeders have been given the right to “harvested material”, meaning any harvest obtained through the unauthorized use of protected plant varieties automatically belongs to the breeder (UPOV, 1991, Article 14.2). Perhaps even more troubling about UPOV 1991, is that farmers are prevented from patenting their own varieties, due to the convention’s strict patent requirements. According to articles 8 and 9 respectively, new plant varieties must exhibit traits of “uniformity” and “stability”, meaning, varieties cannot exhibit signs heterogeneity or different traits from one cycle of propagation to the next. Olivier De Schutter, the United Nations Special Rapporteur on the right to food, makes it clear that these requirements exclude smallholder farmers, because their native and heirloom varieties, which are grown *in-situ* and not in a laboratory, are “inherently unstable and in permanent evolution” (UN General Assembly, 2009, Ch. II, A 13.) Because of these actions, UPOV 1991 has bolstered the professionalization of plant breeding while moving it further away from the act of farming. This should not be too surprising since a prominent negotiator of UPOV 1961, 1972, 1978 and now 1991, has in fact been the seed industry (Association for Plant Breeding for the Benefit of Society, 2011).

More attention is now being given to how these protections endanger traditional plant breeding systems, food security and biodiversity. Ironically, the very incentive being used to attract private industry to agricultural innovation i.e., exclusive rights over plant material, is eliminating farmers from the reproduction process of seed. It is important to note that developing countries are not required to adopt UPOV legislation, however, many have been forced into compliance through

trade agreements, such as the Central American Free Trade Agreement, NAFTA, USA-Jordan and EU-Mexico (Jhunjunwala, 2009). These agreements provide developing countries with direct access to export markets which tend to enforce strict adherence to UPOV regulations.

Another example of private business interests being manifested through policy, occurred during the 1994 Uruguay Round concerning the General Agreement on Tariffs and Trade (GATT). From this Round emerged not only the World Trade Organization, but also the Trade-related Aspects of Intellectual Property Agreement, or TRIPS, which states that all WTO members “shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof” (Article 27.3 (b) of TRIPS). *Sui generis* systems, are “unique” protection systems, which allow WTO member countries to define their own form of protection of plant varieties along with the appropriate manner of enforcement. Specifically, *sui generis* is portrayed as an opportunity for developing countries to create plant variety protections that better reflect the interests of traditional and indigenous farmers. In practice, however, many WTO member countries have not been made aware of this option and many have unknowingly become signatories of the default plant variety protections of UPOV, greatly diminishing farmer control over seed reproduction (Jhunjunwala, 2009). In fact, India is the only country that has opted to develop its own plant variety protection system for the sake of preserving “farmers’ rights”, or the right to save, reuse and sell seed.

The UPOV Act of 1991 and the WTO’s TRIPS agreement are two examples of how specific international trade policies create a more attractive environment for private seed companies. Not only do they restrict farmers from saving or selling patented plant varieties, they make it virtually impossible for any farmer or seed cooperative to create their own protected plant varieties due to the restrictions of “uniformity” and “stability”. IPRs effectively provide the seed

industry with the legal means to make exclusive what had previously been an open and collective process. There exist, however, other non-legal means for the seed industry to exert control over the process of plant breeding.

Hybrid seeds, more commonly called “improved” seeds, are created through a closed pollination process commonly referred to as hybridization, in which the pollen of two different species or plant varieties is crossed by human intervention (Seed Savers Exchange, 2012). Hybridization occurs randomly in nature but it is done deliberately by the professional seed industry to yield certain patentable traits. Most commonly, the process of hybridization has been used to create high yield varieties of corn, wheat, soybean, rice and fingerlings. In countries like Guatemala, however, plant scientists also develop improved varieties of non-traditional export crops (NTXs), such as cauliflower, broccoli and snow peas, which are grown in the tropics and sold to vegetable markets in the United States and Europe (Isakson, 2014). In some cases, improved seeds do produce higher yields than native or heirloom seeds grown through traditional breeding processes. They do so, however, only temporarily as saved hybrid seeds generally produce increasingly poor and erratic yields through successive generations (Yapa, 1993). Perhaps more important is the fact that improved seeds do not produce higher yields on their own. They are genetically engineered to respond to inorganic inputs, such as synthetic fertilizers and pesticides. Most of these inorganic inputs originate from the same company supplying the improved seed. The seed company Monsanto, for example, sells an improved variety of corn that must be paired with their pesticide *Round Up*. The all too conspicuous name for this popular product is, *Round-Up Ready Corn*.

Therefore, improved seeds cannot be cultivated by farmers without also applying external inputs. Cultivation can also not continue unless farmers repurchase improved seed after each

harvest. This cycle of dependency is further exacerbated by the fact that synthetic fertilizers and pesticides, like improved seeds, become increasingly obsolete over time. Synthetic fertilizers supply nutrients directly to the plant, drawing nutrients away from the top-soil and eventually leading to erosion. Thus, higher quantities of fertilizer are required as the soil is drained of its organic content and its ability to support plant life. Increasingly large applications of pesticides are also required because pesticides destroy insect life indiscriminately thus eliminating natural predators. Overtime, pests develop genetic immunities to the chemicals being applied requiring that the agrochemical industry produce more powerful pesticide technology. Farmers are then left with the option of purchasing the new technology, applying greater quantities of the obsolete technology, or abandoning their efforts all together. With all these built-in restrictions, IPRs hardly seem necessary to prevent farmers from attempting to save and reuse improved seed. Nevertheless, in countries where IPRs are less strictly enforced, seed companies have employed genetic-use restriction technologies (GURTs) to maintain exclusive control over the reproduction of their innovation (UN General Assembly, 2009, Ch. III, A 41.). GURTs, or “terminator technologies”, serve no agricultural function other than to prevent seeds from germinating unless other proprietary chemicals are also applied (Kloppenborg, 2010).

These protections granted to the private seed industry have not gone without critique. Olivier De Schutter has brought to the UN General Assembly’s attention that UPOV 1991 and IPRs over protected plant varieties, curtail farmers’ rights to save, use, exchange and sell seed. Despite this critique, however, improved seeds remain central to the global food security strategy. According to the 2016 FTF Progress Report, new policy reforms have been made to facilitate the development and distribution of improved, drought-tolerant, hybrids of maize soybean and rice to farmers in Mozambique, Nepal, Tanzania and Ghana (Progress Report, 2016). On the surface,

these innovations, and their increased distribution to smallholders, appear to provide a logical solution to the food security problem, insofar as it is perceived as a problem created by a lack of development. Ironically, the development of new plant varieties is predicated on government, private and university access to the wealth of biodiversity available in developing countries near the tropics (Kloppenburg, 2010). The protections placed on these improved plant varieties, whether through IPRs, hybridization or GURTs, effectively privatizes the biodiversity created by farmers without their consent. This broad and complex process, which I have attempted to describe in some detail, has been summed up by the scholar and activist Vandana Shiva as nothing less than biopiracy, “the patenting of indigenous knowledge related to biodiversity” (Shiva, 2007, 371).

Having poured over FTF’s food security strategies, it seems unlikely to me that it is their intention to separate farmers from the reproduction process of seed, nor to engage in biopiracy. Nevertheless, the authors which I have referenced in this chapter make it quite clear that the existing legal and ideological frameworks surrounding intellectual property rights and improved seed technology make it increasingly difficult for nearly all farmers to save and selectively breed new species of plants without violating either a trade agreement or the intellectual property rights of an individual or corporation. We should all be concerned with this subtle but profound shift in our agricultural system. It has caused farmers to grow fewer crops and to focus on high yield varieties which are bred for genetic uniformity, stability, and often, sterility. This system differs greatly from the past millennia of agriculture, in which farmers followed lessons observed in nature to develop complex and highly productive polyculture systems. A well-known example being the *three sisters*, which takes advantage of the natural relationships between corn, beans and squash. The *three sisters* design often serves as the starting point for the much more complex *milpa system* practiced throughout Mexico and Central America. In this system, the corn stock provides a

structure for the bean plant to secure itself to as it climbs toward the sun, while the bean plant fixes nitrogen in the soil. Nitrogen is absorbed by the squash which itself provides ground cover to conserve water and which flowers to attract pollinators. Polycultures, and agroecological systems such as these, have proven time and again to be more productive and sustainable in terms of both efficient food production and plant evolution than any modern-day example of genetic modification (Altieri, 2011).

As today's agricultural system pushes us in the direction of genetic uniformity and hybridization, we risk losing what little biodiversity we have left. Already, 90% of the crop varieties grown in the US over the past 100 years are no longer grown commercially (Muir, 2011). This matters greatly in the era of climate change because crops are better able to respond to environmental stressors, such as drought, pathogens and pests, when their population is more genetically diverse (Muir, 2011). For these reasons, it will become increasingly important that we develop a solution to food insecurity that does not also remove farmers from the reproduction process of seed by allowing private corporations to appropriate and privatize the knowledge and biodiversity of plant life. We need to develop a solution to food insecurity which places the intellect, ability and experience of farmers at the center of the reproduction process and the future development of crop diversity. Clearly, we cannot develop such a solution with the same mind set which has permitted the commodification of seed and agricultural knowledge. Therefore, the task of the following section is to focus on an entirely different ideological approach to thinking about and acting upon food insecurity. It is the idea that global food security can never truly be achieved until the rights of people and nations to define their own food and agricultural policies, including trade, development, aid and intellectual property rights, are upheld and protected. It is the idea that food sovereignty is a necessary precursor to food security.

Chapter 3: Food Sovereignty

Central to the understanding of food sovereignty is the belief that *how* our food is produced is just as important as food itself. This belief is born out of the antagonism felt by millions of smallholder farmers who recognize that the process of producing food today, using patented seeds, GMOs, systemic pesticides and synthetic fertilizers, is utterly inadequate for sustained food production, because it is a process imbued with the obsolescence of capitalism. This belief rejects the primacy of the free-market in agricultural development which promotes capital intensive, private-sector innovations as the best solution to food insecurity. Instead, it promotes what is practical, local, sustainable and just in all communities, to find the right steps, and not silver bullets, to meaningfully discuss and address the root causes of poverty and hunger. Most of all, it promotes peoples' right to define their own food and agricultural systems understanding that it is through open public deliberation over such important issues that true food security strategies are created. It is this last point, the right to define one's own food and agricultural system, which most clearly distinguishes the food sovereignty mindset from that of food security, but it is also the point about which food sovereignty advocates debate most passionately.

In this chapter I explore what it is that makes the rights-based approach of food sovereignty so contentious. At the center of the issue is the reality that food sovereignty is a 'moral enterprise' opposed to the business as usual approach to ensuring the human right to food. This opposition raises several questions that I will address in this chapter about the human right to food. Namely, "Is the right to food meaningful?" and "Is it all about rights?" These are critical questions because they force us to ask whether the current framework for ensuring the human right to food is working, and whether what it is working towards is truly desirable. This inquiry reveals perhaps even more important and compelling questions which have received much less attention. The questions I am

referring to are addressed by Robert Sack in his book, a *Geographical Guide to the Real and the Good*, and they concern the justification for rights within a liberal democracy. Namely, how do we know whether the rights which we demand are themselves good and how can we be sure that anything *good* will come from them? The concern is this, if the function of a liberal democracy is merely to protect and ensure our individual rights, what if anything is ensuring that we put our rights to good use? Historical novelists like as Gary Cross have shown that an emphasis on rights and self-interest can easily devolve into a “consumers’ democracy” (Cross, 2002). In this scenario, progress towards food security is equated to individuals having more freedom to access goods from the market. It says nothing of the right to control how those goods are financed, produced, traded and distributed. This, I argue, is precisely the approach to food security that has given the human right to food its increasingly hollow connotation.

Is the right to food meaningful?

To be clear, there have been, and there will likely continue to be, many definitions of the right to food. Food sovereignty represents one of many definitions and certainly not the first. Under UN General Comment 12, the Committee on Economic, Social and Cultural rights provide a definition to what they have chosen to call the ‘adequate right to food’. Which is now a central tenant of the current rights based framework of the FAO and the global food security strategy. According to General Comment 12;

The right to adequate food is realized when every man, woman and child, alone or in community with others, has the physical and economic access at all times to adequate food or means for its procurement (CESCR, 1999).

Within the General Comment 12 document, much is said about the meaning of the language in this definition. Special attention is paid to the meaning of *physical* and *economic access*. Both imply that vulnerable persons who lack the physical, mental or financial means of procuring food for an adequate diet should be ensured the equal right to food access. Rightfully, this includes ‘landless persons’ and ‘indigenous population groups’ who might be without sufficient capital to access food through the market place as a consumer, while also being denied access to land to produce food sustainably. Interestingly, the individuals and communities from within this vulnerable segment of society also tend to represent those in favor of food sovereignty. Food sovereignty is a radical democratic project galvanized by the transnational peasant movement, La Via Campesina, to bring about peasant-driven agrarian reform. According to the Declaration of the Forum for Food Sovereignty in Nyéléni, Mali 2007, food sovereignty means,

The right of peoples to healthy and culturally appropriate food produced through sustainable methods and their right to define their own food and agricultural systems - The Declaration of Nyéléni, Paragraph 2 (2007, February)

What should become clear when comparing these two interpretations of the right to food, is that the former characterizes an inherent or natural right to food, while the later characterizes a right to have a right. Food sovereignty does not demand a right to something that must be provided by someone else, but rather the right to do something for one’s self and one’s community. In this case, it is the right to define one’s own food and agricultural system. This distinction is crucial to understanding the flaws within the current rights-based framework employed by the UN, the US, the WTO and the global food security strategy in general. The most significant flaw being the fact that natural rights, or the inherent right to something because we are human and because we exist, themselves do not exist (Patel, 2009). For the right to food to be meaningful there must also exist a guarantor of food, or the means of food production, and a system by which the guarantor is held

accountable. Simply declaring the right to food in no way ensures that it will be upheld and that food will be provided, or that it will be provided in the same way, in all places, always. This of course does not mean that human rights do not exist, just that we are responsible for bringing them into existence.

The philosopher Hanna Arendt, to whom writer Raj Patel refers in his work, introduces the important concept of the *right to have rights* to help convey the essential argument that we are denied our rights when we are deprived of our ability to effect change on the world around us (Arendt, 1967). Following her logic, the right to food cannot be about the right to *receive* food or the means of food production, because those things could theoretically be provided under a military dictatorship which might simultaneously deny our right to take ‘action’ and express ‘opinion’ that would alter the status quo. The right to food must therefore begin with the right to action and opinion because it is only through this process that we create rights for ourselves. It is the only way by which rights can be brought into existence and made meaningful. This is a theoretical argument as to why the current rights-based framework cannot meaningfully ensure the right to food, because it does not ensure the right to have rights in the first place. It merely promises, with no legal means of guaranteeing, the provision of food access. Food sovereignty provides a more meaningful interpretation of the right to food because it begins by asserting the right to define one’s own food and agricultural system. In this way, food sovereignty departs from the conventional food security narrative which does not require that people be allowed to effect change in world around them, only that they be provided with the means to sustain an adequate diet.

There also exist concrete examples of how the current rights-based framework fails to meaningfully ensure the right to food. On October 15th and 16th of 2016, the Monsanto Tribunal was held at the Institute of Social Studies in The Hague. The Tribunal is an international civil

society initiative with the stated purpose of getting a ‘symbolic’ ruling against the world’s largest agrochemical company, Monsanto, for their violations of human rights, including the right to food, as well as their crimes against the environment, including ecocide. The symbolic ruling is meant to advance the conversation of how legal mechanisms can be established to hold multinational corporations accountable for human rights violations, because no such mechanisms currently exist. The Tribunal featured five internationally renowned judges from Canada, Mexico, Senegal, Belgium, Argentina and Australia, along with twenty plaintiffs and experts from five continents, and a total of 1230 signatory organizations, movements and institutions from around the world. Judges ruled on the questions of whether the firm Monsanto violated certain rights as recognized by the International Covenant on Economic, Social and Cultural Rights (ICESCR), the International Criminal Court (ICC) and the Human Rights Council (HRC). The Tribunal was organized around six questions ranging from whether the firm ‘is complicit in the commission of a war crime’ as defined by the ICC, and to whether the firm violated ‘the human right to food’, as defined by the ICESCR. In Article 11 of the ICESCR the right to food is interpreted as the ‘right to be free from hunger’. This interpretation ought to raise a red flag indicating its potential ineffectiveness, because it interprets the right to food as a ‘negative’ right, or the right to be free *from* something, and stops short of ensuring the right *to* effect change in one’s own food or agricultural system. In section 2a of Article 11, 165 signatory countries are obligated to;

[i]mprove methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources (Article 11, 2a, ICESCR).

This policy leaves open many points of entry for administrative discretion. Perhaps the most significant omission is that it does not provide any indication as to *who* is responsible for ‘improving methods of production’, nor *whose* ‘technical and scientific knowledge’ might be prioritized. Seeing, however, as the existing legal framework of the WTO overtly favors the private interests of multinational seed and agrochemical corporations, it is all too likely that those held responsible for ‘improving methods of production’ will remain the same corporate entities whose actions and technologies have led to the rapid erosion of farmers’ rights. The question put forth by the Tribunal as to whether the firm Monsanto has violated the ‘right to food’, as defined by Article 11 of the ICESR, suggests that the firm’s actions, and or, technologies have infringed on UN member state’s’ abilities to ensure their citizens’ right to be free from hunger. Within each of the seventeen testimonials, however, are examples of State-run entities carrying out, either willingly or forcedly, the demands made by the Monsanto firm to require that farmers use their proprietary technology.

In Argentina, the National Agricultural Technology Institute sponsored the use of Monsanto’s Round-up (RR) Soy and chemical herbicide, glyphosate. Over time, certain weeds, such as Johnson grass and pigweed, developed resistances to Round-up and glyphosate. Farmers were obligated to purchase more powerful herbicides, such as Round-up 2, Round-up Ultra Max and glyphosate 2.4-D to retain their access to the export market. Around the same time, Monsanto engineers began promoting X-tend, a new GM soybean with genetic resistance to glyphosate 2.4-D. The application of which has the potential to wipe out any nearby non-herbicide resistant soy, effectively killing the firm’s competition, and forcing farmers to adopt the new GM variety (International Monsanto Tribunal, 2016a).

In Sri Lanka, in order to obtain agrarian loans, farmers were required to adopt Monsanto's genetically modified seeds and agrochemicals. When first introduced, hesitant farmers accepted Monsanto's donated products, but opted not to use them for fear of causing environmental damage to their fields. In turn, they were beaten and harassed by state-sponsored officers. Soon after being forced to adopt these technologies, rice farmers began noticing a decline in the number of beneficial frog species in their fields. In nearby streams, groups of dead fish began floating to the surface. In addition, previously uncommon health problems, such as kidney disease, spread throughout farming communities. In 2010, doctors from Rajarata University produced conclusive results connecting an outbreak in kidney disease to the use of the Monsanto's agrochemicals (International Monsanto Tribunal, 2016b).

On April 18th of 2017, the judges delivered their ruling to question two of the tribunal concerning the alleged infringement of the right to food. The judges came to the following conclusion:

[t]hat Monsanto has engaged in practices that have negatively impacted the right to food. Monsanto's activities affect food availability for individuals and communities and interfere with the ability of individuals and communities to feed themselves directly or to choose non-genetically modified seeds. In addition, genetically modified seeds are not always affordable for farmers and threaten biodiversity. Monsanto's activities and products cause damage to soil, water and to the environment more generally. The Tribunal concludes that food sovereignty is also affected and underlines the cases in which genetic contamination of fields forced farmers to pay royalties to Monsanto or even to abandon their non-GMO crops due to this contamination. There is indeed an infringement on the right to food because of aggressive marketing on GMOs which can force farmers to buy new seeds every year. The dominant agro-industrial model can be criticized even more strongly because other models - such as agroecology - exist that respect the right to food (International Monsanto Tribunal, 2017)

This decision, however precise and symbolic, will alone not ensure change in the structural issues of the international economic system that have allowed for these violations to occur. In fact,

in certain ways we appear to be heading in the opposite direction. Less than a month before the Tribunal ruling, on March 27th of 2017, the European Commission approved the merger between US-based chemical companies Dow and DuPont, further concentrating the power over the means of food production into the hands of yet fewer multinational agrochemical corporations. These coinciding events should serve as a sobering reminder that the human right to food has little meaning if it does not also ensure the right to have a right over food systems and the right to shape food policy.

Is it all about rights?

Raj Patel makes the rather compelling point, that “if we talk about food sovereignty, we talk about rights, and if we do that, we must talk about ways to ensure that those rights are met, across a range of geographies by everyone, in meaningful ways” (Patel, 2009, p.671). The implication of his message is that certain conditions must first exist in order to make the right to shape food policy meaningful. These are of course the conditions pursued by any democracy; that all people be able to substantively engage with policy. A complication of food sovereignty, however, is that it demands that everyone be able to substantively engage with food policy across geographic scales, from the local to the global. Patel is right to point out that this demand quickly becomes an issue if we consider that *everyone* includes both multi-national agrochemical corporations as well as peasant farmers. Even within communities, systemic inequalities of power and privilege can and do concentrate control over the means of food production into the hands of the few. Nevertheless, food sovereignty rejects those social and economic circumstances, whether it be patriarchy or structural adjustment programs, which readily facilitate the uneven distribution of power within food and agriculture. It rejects the notion that the right to food simply implies the right to physical and economic access to food, made more accessible through a liberated global

market-place. Food sovereignty is founded on the steadfast belief that food is a human right and not a privilege, and that this right includes the right to shape food policy.

The claim to rights is an effort on the part of La Via Campesina and the food sovereignty movement to dismantle the structural inequalities of the international economic system by ensuring that the interests and concerns of all food producers carry equal weight in the development of food, trade and agricultural policy. This means, for example, that the interests of Haitian rice farmers, who cannot compete with cheap imported rice from the United States, be given equal weight in the development of USAID policies, as say the private developers modified rice or U.S. rice farmers themselves. In this way, food sovereignty is also a call for democracy within the international economic system, beyond the borders of individual nation states. It is a call for what the renowned political theorist, Seyla Benhabib, refers to as cosmopolitan federalism, or the application of norms and values of democracy at the transnational and global sphere (Benhabib, 2005). In her work on the disaggregation of citizenship, Benhabib argues that as our economies, cultures and societies become more transnational, we ought to ready ourselves for new “modalities of political citizenship”, or new ways of participating in the democratic process and ensuring rights beyond our own borders.

Encouraging us in this direction, Benhabib points to the emerging tension within modern liberal democracy brought on by increasing transnational migration. In particular, she points to the tension “between the rights of humanity in our person and the rights that accrue to us insofar as we are members of specific republics” (Benhabib, 2004, p.27). This represents the dilemma of our political and geographic identity, that we are granted certain rights for the sake of being human and certain other rights for the sake of belonging to a particular group, whether that be the state, an international trade organization, or a group of nations, like the European Union. The disconnect

between these multiple identities is revealed by the varying degree of political inclusion that we are granted at different geopolitical scales and as we move through space. Although, Benhabib in her work is referring to the uncertainty of political inclusion and the rights of migrants and refugees, it is clear that a similar disconnect exists when we think about the political inclusion and the rights of smallholder farmers. On the one hand, smallholder farmers around the world, in Africa, South East Asia and Central America, are given new agricultural innovations in the name of food security and the right to food. While on the other hand, smallholder farmers are not included in the political process outlining the restricted uses of these new agricultural innovations, such as UPOV 91 and TRIPS, which inhibit farmers from ensuring food sovereignty, or any measure of control over the food they produce and consume.

Patel and many others, such as the agronomist Miguel Altieri, have made it quite clear that smallholder farmers, who are responsible for producing roughly 70% of the world's food on plots averaging 2ha (Altieri, 2011, p.3), are wildly unrepresented within institutions responsible for regulating agricultural trade and food policy. In an interview with Hannah Wittman, Paul Nicholson of La Via Campesina attributes the underrepresentation of smallholder farmers to the “social perception that large food chains feed society” (Wittman, 2009, p.681), a claim that could not be further from the truth. Yet we see that within the global food security strategy this same perspective serves as the guiding principle in expanding food security efforts. Evidence of this can be found within the language of the FTF's 2011 Global Food Security Research Strategy report. In this report FTF researchers contend that the “productivity gains necessary to meet future food demand require developing new seeds that push the productivity frontier to the next level” (Feed the Future, 2011, p.4). To the untrained eye, the ideological power conveyed in the language of this approach might go unnoticed. When one begins to read more deeply, however, into FTF's

well documented methods of poverty alleviation, one thing becomes very clear – that new seeds ought to be those developed in partnership with private sector innovators.

Today, such innovators include, among others, the agrochemical firms Bayer and Syngenta which are closely involved with FTF's *Partners for Innovation* program. As discussed earlier in the chapter, improved seeds induce scarcity by transforming what was once an integral part of the commons i.e., seed and agricultural knowledge, into a patented commodity. The justification for allowing seed to become one's intellectual property is that the protections offered to private plant breeders will induce more competition between private plant breeders will produce greater varieties of high yielding, drought-tolerant, and pesticide resistant seed necessary, of course, in the face of climate change. This approach has been refined by FTF's *Partners for Innovation* program to increase the availability and access of such innovations to peasant farmers and especially female farmers. Their aim is to increase the global food supply by integrating more of these farmers into the international economic system and providing them with the means to produce certifiable, traceable and standardized crops.

Rights are a main concern for the global food security strategy (GFSS), but they are not the same rights as those demanded by the food sovereignty movement. Namely, the rights being protected most vehemently by the GFSS are plant breeder's rights which eliminate the right of farmers to save protected seed varieties. The legal mechanisms requiring that WTO member nations enforce plant breeder's rights i.e., UPOV 91 and TRIPS, as I have said, inhibit the free exchange of seed between farmers who themselves were not politically included in the development of these laws. This is particularly disheartening considering the WTO is widely regarded as a model of democracy among international institutions. This also brings up another important point by Patel, that we must do more than appeal to the democratic institutions which

might one-day uphold the rights to food sovereignty, because these institutions are themselves mired in the “equality-distorting effects of sexism, patriarchy, racism, and class power” (Patel, 2009, p. 670). We only have to look as far as the IPR agreements within the WTO to recognize that such institutions quite readily facilitate the male-dominated expansion of high-input, high-cost, export-oriented agriculture over the community driven evolution of native seed and deep agricultural knowledge, which women and indigenous peoples are historically responsible for preserving and advancing. This, however, is not a call for the dismantling of democratic institutions. In a recent interview with National Public Radio, former Secretary of State Condoleezza Rice gave a sobering reminder that institutions are not perfect, but they’re the bedrock of democracy. The rights-based approach to food sovereignty should be regarded as nothing less than an appeal to our institutions to uphold the most basic human rights, such as the right to food. It is important to recognize, however, that an appeal to human rights is but one way that food sovereignty will be brought about.

To bring about food sovereignty, Patel suggests that we also focus our efforts on two other important tasks. The first is to examine the substantive processes by which food sovereignty is realized on the ground. The second is to take on activities and projects that will bring us closer towards Benhabib’s depiction of a moral universalism, where “all human beings, by virtue of their humanity, are entitled to moral respect from others, and that such universal moral respect minimally entails the entitlement of individuals to basic human, civil, and political rights” (Benhabib, 1994, p.173). Patel is of the opinion that we cannot make the right to shape food policy meaningful until we first establish a society in which everyone is able to “substantively engage with those policies” (Patel, 2009, p.670). This requires that we first eliminate the basic inequalities

of power within society, as well as our institutions, which perpetuate the exclusion of disempowered people and communities from the political process.

Others have come to similar conclusions. The International Assessment on Agricultural Knowledge Science Technology and Development, led by the World Bank's chief scientist Robert Watson, finds the rights-based approach of food sovereignty to be "an explicitly moral enterprise that stands in contrast to the economic process of market-driven globalization" (Ishii-Eiteman, 2009, p. 691). In other words, the conscious moral choice is being made to devolve "more responsibility and decision-making power to farmers, indigenous peoples, food workers, consumers and citizens for the production of social and ecological knowledge" (Ishii-Eitman, 2009, p. 691). Of course, not all contemporary thinkers on the topic of human rights and food sovereignty agree with the rights-based approach. Jaqueline Mowbray from the University of Sydney School of Law, cannot help but question the efficacy of the rights-based approach, "since human rights law focuses on state responsibility" and "may not be a particularly effective tool with which to challenge the activities of non-state actors" (Mowbray, 2007, p. 556). If we consider that the ruling against Monsanto for violating the human right to food, under Article 11 of the ICESR, was merely symbolic, we can more clearly see Mowbray's point.

There is another reason, however, as to why a purely rights-based approach to food sovereignty might not be as effective, unifying or equalizing as its advocates would hope. Put simply, it is incomplete. The rights based-approach to food sovereignty is, as Robert Sack has described liberal democracy, "a process stemming from rights, and this is where the justification stops" (Sack, 2009, p. 240). The assumption made by this approach is that our right to define food and agricultural systems precedes our ability to know how to create *good* food and agricultural systems. It stops short of providing a way to determine whether the progress we make in the name

of food sovereignty is in fact good and meaningful progress. As Sack would argue, “it claims instead that rights precede the good” (Sack, 2009, p. 240). Within this approach, democracy functions instrumentally to assure that individuals and communities have the freedom to pursue their own self-interested goals in relation to food and agricultural policy. This return to liberal democracy seems to be where the most internationally recognized representatives of food sovereignty are heading. According to La Via Campesina, “food sovereignty is not the patrimony of any particular organization” (Patel, 2009, 680); it is not the responsibility of any central committee to determine what good food policy is. Therefore, food sovereignty seems to be moving towards Michael Sandel’s depiction of the liberal vision, that “a just society does not promote any particular ends, but enables its citizens to pursue their own ends, consistent with a similar liberty for all” (Sandel, 1984, p. 82). I find this direction troubling for two reasons. First, it allows food sovereignty to remain a relative term, discounting the importance of a unified and moral sense of direction. Therefore, it inhibits the pursuit Patel’s radical-egalitarianism and Benhabib’s moral-universalism which are necessary for food sovereignty, as a right, to be meaningful. Second, this direction encourages us to subscribe to a very uninspiring view of democracy. If we see democracy only as a means to tolerate one another while we pursue our own self-interests, we will forget that democracy is “integral to a moral way of life” (Sack, 2003, p. 242). In other words, it is our only means for becoming less insular and more aware of the world and of each other.

Additionally, because the rights based approach presupposes the existence of a right to food sovereignty before food sovereignty can meaningfully exist, it detracts from the actions and progress being made towards food sovereignty on the ground today. In South East Asia, the Bangladesh Farmer’s Federation (BKF) and the Bangladesh Women Farmers’ Association (BKS), has lead landless peasants in place-based occupations of fallow farmland in the south of the country

where climate change is posing the greatest threat to the country's food security. Through land occupation, the BKF and BKS directly challenge the capitalist tradition of accumulation by dispossession. Their efforts to repossess the commons are "consolidated through practices of food production, socialization, and the reproduction of labor power" (Routledge, 2016, p. 73). With their efforts they have distributed approximately 76,000 acres of land to more than 107,000 landless families in Bangladesh. In South America, the Brazilian Movement of Landless Rural Workers (MST) are engaged in similar but larger scale efforts to bring about land reform through place-based occupations of large idle estates. Moreover, within the Zapatista Autonomous Municipalities of Chiapas, Mexico, entire communities have established place-based norms around agroecology to advance the decolonization of food systems and to foster more spaces for participatory-democracy and food sovereignty.

While these examples are themselves quite significant, they represent only a small number of the total projects in which various forms of food sovereignty are being pursued and practiced in communities around the world today. And while each project necessarily pursues a unique vision of food sovereignty, from increased democratic participation in local agrarian policy to complete agrarian reform, they all engage in the same prefigurative process. Meaning, "they attempt to practice the future they wish to see" (Routledge, 2016, p. 74). Sack refers to this process as our geographic problematic or condition "of not being able to accept reality as it is and to continuously create places to transform it into what we think it ought to be" (Sack, 2001a, p. 107). Morality necessarily enters into this process at the point when we begin to articulate how places *ought* to be. And so, if we accept that our geographic condition exists then we must also accept that we are capable of making moral decisions to move toward or away from good food systems without first being granted the right to do so. This is not to suggest that human rights are completely ineffective.

On the contrary, human rights are an essential means for us to communicate moral standards across an increasingly connected global society. Rather, as I have stated earlier, it is a reminder that human rights themselves do not occur naturally, and must be brought into existence through our own actions as moral agents engaged in the continual process of place making. For this reason, food sovereignty cannot be all about rights because food sovereignty is already being practiced outside of the movement's desired rights-based framework.

The message I hope to convey here is that food sovereignty is brought about not only by rights, but also by acting upon our own moral agency to create places which more closely reflect our image of what we believe more just, natural and truthful food systems ought to look like. By creating, destroying and recreating places to better reflect this image, we necessarily imbue the places we create, and the projects that we use them for, with our own moral judgments, whether we choose to acknowledge that or not. I believe a critical next-step in the dynamic scholarship on food sovereignty is to begin to articulate the *positive* aspects of this movement, and to answer the moral question, "What sort of places *should* we create?" For Sack, this question lies at the heart of our geographic condition. It is a question we must have answers to because, as Sack writes, we must have places. Unfortunately, this is a question that contemporary postmodern thinking discourages us from asking. Postmodernism tends to see morality as merely a product of the empirical, situated in our historicity and sociality which we are of course subject to, and yet cannot change. The problem with this increasingly popular mode of thinking is that it assumes a basic human inability to act outside of our own self-interest and situatedness. It limits our understanding of what progress can potentially mean by ignoring, or even rejecting, the possibility that we might also be capable of pursuing ends that are not beholden to human self-interest and which are derived

from facets of reality that we did not create. We can think about these facets of reality as the *real* and the *good*.

The *real* and the *good* and their connection to geography is the foundation of Robert Sack's moral geographic theory and the main topic of Chapter 5. The purpose of bringing a moral theory into the discussion is not to provide absolute answers to the difficult questions concerning poverty and hunger. Rather, it is to provide a set of guideposts so that we may judge whether the places and projects we create to help alleviate food insecurity also move us in the right direction towards real moral progress. We must be willing and able to engage in this sort of dialogue, a dialogue with explicit moral foundations, because at some point the rhetoric surrounding food insecurity is made into decisions with real and tangible consequences. These decisions are most often attributed to the theoreticians and architects behind food and agricultural policy, but they are being increasingly made by planners; both in the professional sense, but also in the practical sense, by a diverse group of actors working on the ground to help communities define their own food and agriculture. Thomas L. Harper and Stanley M. Stein, in regards to the moral foundations of planning, write the "it is not possible to justify the goals of planning without appeals, whether explicit or not, to normative ethical theories" (Harper & Stein, 1992, p. 105). Therefore, another important topic of Chapter 5 looks at how Sack's theory might help to articulate worthy moral goals for food sovereignty and for progress more generally.

Before diving into the mechanics of Sack's moral geographic theory and its implications for food sovereignty, I believe it is important to first present the case for moral theory, and the articulation of values, in modern society. This is an important step, because it is here, at the intersection of morality and social praxis, where we as planners and social scientists are well positioned to offer valuable insight, or a sense of direction, to the questions "Where are we going?"

and “Is this direction desirable?” Unfortunately, it is here where we have historically neglected the intellectual and practical merit of such insight.

Chapter 4: Moral Theory in Modern Society

Intellectual Virtues

What distinguishes the study of natural sciences and technology from the study of social science and planning? Are these intellectual virtues categorically different, or can one be approached from the same logical standpoint as the other? For the geographer and planning theorist, Bent Flyvbjerg, whose work on phronetic planning research builds upon the Aristotelian virtue of *phronesis*, or ethical praxis, social science and planning cannot be *scientific* in the same sense as the natural sciences or the development of technology. Whereas social science and planning are concerned with the “deliberation about that which is variable in human affairs” (Flyvbjerg, 2001, p. 112), the natural sciences and technology are concerned with discovering and creating that which is invariable and widely applicable throughout society. Aristotle referred to these three intellectual virtues as *episteme*, *techne* and *phronesis*.

In short, *episteme* is the intellectual virtue associated with the demonstration of scientific knowledge, or *know why*. *Episteme* is cumulative in the sense that new discoveries of context independent facts, such as gravity, heat and hunger, as rudimentary examples, contribute to the body of one’s epistemic understanding of the world. Over the centuries, intellectual contributions by Socrates, Plato and influential thinkers of the Enlightenment tradition, have made epistemic knowledge the dominant intellectual virtue of modern society, celebrated most commonly by the scientific method. *Techne*, or technical knowledge, is the intellectual virtue concerned with putting *episteme* to work through the application of technical skills, or *know how*. *Techne*, as interpreted by Flyvbjerg, has the objective of applying technical knowledge and skills to pragmatic or instrumentally rational decisions, where goals are consciously defined by the interests of those

employing technical skills to achieve a particular goal. The body of epistemic knowledge surrounding plant genetics, for example, might be employed by plant geneticists and molecular biologists to produce, by virtue of *techne*, pesticide resistant varieties of corn or soybean. It is not the objective of either *episteme* or *techne* to deliberate about their practical ethical employment, for this is the job of Aristotle's most esteemed intellectual virtue, *phronesis*. From an Aristotelian point of view, *phronesis* is the most important of the three "because it is the intellectual virtue that may ensure the ethical employment of science (*episteme*) and technology (*techne*)" (Flyvbjerg, 2004, p. 289).

Phronesis is the virtue which Aristotle held responsible for the judgments and choices of human action. It can be thought of as the skill we employ when we must deliberate about the values and interests concerning a situation where the options for action are variable. In other words, the rational of the situation cannot be boiled down to a set of rules, as epistemic or technical knowledge would prefer and likely assume. For example, FTF scientists are now using new plant breeding technologies to address various stress factors facing staple crops in developing countries, including pests and diseases (biotic factors) and soil salinity, drought and heat (abiotic factors). At the same time, they are concerned with allocating agricultural resources to meet the needs of smallholder and female farmers. To this end, they are working to "advance women's leadership in science and technology through proactive recruitment, mentoring, and targeted research support" (FTF, 2011, p. 4). The overarching assumption, however, remains that "the greatest social benefits accrue to scientific discoveries with wide applicability" (Feed the Future, 2011, p. 9). In this sense, FTF researchers are making the value-rational decision to open spaces of scientific development to a greater diversity of perspectives and world views. This decision, I believe, is based on the normative values and interests of their organizational network. They are also making, however,

the instrumentally rational decision to promote the development, distribution and adoption of homogenous varieties of certified seed to increase farmers' access to global markets. There does not seem to be any consideration that this approach might present ethical dilemmas in practice, such as the erosion of pre-existing production relations supported by the *in-situ* preservation and evolution of native seed.

Food security practiced as *episteme* and *techne* tends to pursue widely applicable and replicable solutions, like the distribution improved seeds, based on assumptions about poverty and food insecurity. As stated in Chapter 2, poverty and food insecurity are assumed to result from a lack of new information and technological innovations. This assumption reflects the historically positivist tradition in the United States, and in other parts of the developed world, which equate progress with technological advancement and increased access to Western scientific information. When applied to food insecurity, this assumption makes it appear counterintuitive to pursue solutions that do not make use of the latest advancements in agricultural technology. Absent from this rationality is a consideration of the ways in which power and values pervade the scientific and technological solutions being promoted. For Flyvbjerg, this is the central task of planning research practiced as *phronesis*, “to provide concrete examples and detailed narratives of the ways in which power and values work in planning and with what consequences to whom, and to suggest how relations of power and values could be changed to work with other consequences” (Flyvbjerg, 2004, p. 283).

Making the relationship between power, values and rationality explicit in food security is becoming increasingly important as regional food security actors are beginning to consolidate their projects around private sector investments. This distinctly positivist trend elevates the instrumental rationality of *episteme* and *techne* to an increasingly authoritative position in determining what

progress toward food security ought to look like. Unfortunately, by diminishing the value-rationality of *phronesis* in the articulation of social goals, we leave ourselves without a moral frame of reference to know whether this direction of progress is itself good.

Daniel Sarewitz describes this phenomenon as the *scientization of controversy*, whereby seemingly value-rational decisions regarding human projects are handed over to “the meaningless task of reducing [scientific] uncertainties pertinent to political dispute, rather than addressing societal problems as identified through open political processes” (Sarewitz, 2004, p.399). Sarewitz illustrates this point with the debate over genetically modified organisms (GMOs) between plant geneticists and microbial ecologists. These disciplinary perspectives have contrasting scientific views on nature. Whereas microbial ecologists are concerned with the impact of GMOs on non-target soil microorganisms and the unintended genetic transformation of native species, plant geneticists are “concerned with controlling the attributes of specific organisms for human benefit” (Sarewitz, 2004, 391). Each discipline is primarily concerned with reducing the scientific uncertainty in their own work and elevating the uncertainty surrounding their opponents. The difficulty here is that both disciplines approach their research from equally defensible scientific standpoints. Generally speaking, rigorous standards, in accordance with the scientific method, are followed whether scientists are focused on the genetic engineering of soybeans, for example, or the unintended micro-evolutionary consequences caused by their cross-fertilization with another species. The point is that we cannot rely solely on scientific facts about GMOs to determine whether and to what extent they should be incorporated into food security strategies, because an excess of seemingly objective facts exists on either side of the debate. This dilemma, what Sarewitz describes as an “excess of objectivity”, is only more complicated when planning for climate change. The author’s underlying message is that we cannot negotiate, let alone arrive at a meaningful

understanding of progress, if we cannot work from a basic set of facts. It is becoming increasingly clear that the continual outpour of competing scientific facts does little to build a foundation for negation. Rather it appears to be contributing to the obfuscation of reality.

Sarewitz raises the question whether, when tackling controversial issues like climate change and food security, we should first strive to discover definitive scientific facts, or whether it would be more effective to begin by establishing “agreed upon values that can inform the articulation of social goals” (Sarewitz, 2004, p. 399). He stops short of suggesting how we might arrive at such a consensus other than by proposing we implement a “quiet period” during heated political controversies which have themselves become overly “scientized”. During such a quiet period, the outpour of scientific results would momentarily cease while politicians on either side of the debate would be required to make their values, interests and allegiances to industry groups explicit, rather than hiding behind the excess of scientific “facts” which speak in their favor. In this way, Sarewitz seems to advocate a similar intellectual shift as Flyvbjerg, to de-center the epistemic and technical basis for political decision making and to re-center the phronetic activities of our democracy. Specifically, they are calling for activities which might make the political values of science less inconspicuous and, in turn, help us to become more aware of how values inform the relationship between power and rationality.

What the two authors are suggesting is not that we adhere to any specific moral theory, but that we promote intellectual activities that bring our values to the fore of political debate, so that we might examine them for their merits as well as their defects. I believe this is a step in the right direction. I am not convinced, however, that simply working harder to deconstruct the nature of political power will bring us closer to state of meaningful negotiation, let alone a state of moral universalism, as discussed by Benhabib. What are we left with once the inconsistencies and biases

of our values are fully exposed? Toward what direction do we proceed when relationships between social power and rationality are deconstructed, and proven to be baseless? Where do we go and what tools do we use to guide us? For Flyvbjerg, planning researchers are well positioned to answer these questions, as it is their task to increase our capacity to think and act in value-rational terms (Flyvbjerg, 2004), or in accordance with our community's unique situational ethics. In other words, when it comes to planning theory, Flyvbjerg favors communitarianism over universal moral theory. He describes the pursuit of universals by fields within the social sciences, including planning, as a misguided attempt to achieve the same intellectual rigor as fields within the natural sciences, such as geology or biology. This attempt, he suggests, results from "physics envy" within the social sciences. For Flyvbjerg, there can be no universal moral frame of reference to guide progress, because our socially and historically conditioned context is the only solid ground on which we have to stand (Flyvbjerg, 2004). The position of communitarianism, much in line with the Foucauldian strand of post-modernism, celebrates our situatedness and the relativity of moral claims (Sack, 2003). Although this it might serve as a bulwark against positivism in planning research, it is less clear how communitarianism protects us from heading down a path toward moral relativism or moral absolutism.

The Postmodern Trend

For communitarians, the good is defined by the social context, goals and purposes of particular communities, rather than a set of abstract principles. Morality within a communitarian framework is exercised by humans doing that which achieves – instrumentally – the good, as defined by their situated context. As planning ethicist Elizabeth Howe explains, ethics which are concerned with the results or consequences of human goals, or *telos*, represent a teleological, or consequentialist moral view point. For example, the question about whether genetically enhanced

seeds and their corresponding technologies yield more benefits than costs to a community is a teleological question. Deontology represents the opposite ethical perspective. It is concerned “not with the consequences of actions, but with the rightness of the act itself” (Howe, 1990, p. 127). For example, the question about whether food insecure communities are engaged in the process of developing solutions to food insecurity, which might include the use of improved or certified seed, is a deontological question. It does not require any particular outcome from our actions, but rather that our actions adhere to moral rules. The question about what these moral rules are, has been given serious thought by well-known ethicists, such as Immanuel Kant and John Rawls. Before I mention these, however, I would first like to conclude the argument for moral theory by completing the connection between *phronesis* and communitarianism, and their roots in post-modernism. The central issue is that while post-modernism helps us to expose the inconsistencies within our situated values and assumed rationalities, it does not provide a positive view of what to do about it (Sack, 2009).

To summarize, *phronesis*, from a purely Aristotelian perspective, is the intellectual virtue employed in reasoned and ethical action. It is distinct from *episteme* (science) because the options for acting in ways that are ethical are variable, whereas *episteme* is concerned with that which is invariable. It is distinct from *techne* (technology) because ethical action is an end in itself, whereas *techne* is concerned with achieving or producing an end other than itself. According to Flyvbjerg’s interpretation, *phronesis* guides us toward reasoned ethical action by clarifying the values, interests and power relations involved in planning decisions. For Flyvbjerg, the core objective of *phronesis* in modern society is to balance the instrumental rationality of science and technology with the value-rationality of our own situational ethics. Other authors, such as Daniel Sarewitz, have also spoken in favor of giving more serious consideration to our values, and their link to power and

rationality, for the sake of reorienting political debate toward the achievement of social goals, rather than the misguided pursuit of definitive scientific solutions. These writings suggest that as modern society progresses, we will continue to face a growing need to meaningfully discuss not simply what we *can* do, from a scientific and technological perspective, but more importantly, what we *ought* to do, from the perspective of values. Flyvbjerg's work is particularly well suited to address this growing need because it re-legitimizes *phronesis*, the intellectual activity by which values are deliberated, reasoned and acted upon. Moreover, he makes the convincing argument, first articulated by Aristotle, that *phronesis* belongs at the helm of *episteme* (science) and *techné* (technology) because without *phronesis*, these virtues cannot envision a world beyond purely analytical or instrumental terms. If we continue, however, to elevate instrumental rationality over value rationality, we will produce, time and again, a vision of the world that is simplistic, directionless and void of any meaning beyond the pursuits of our own self interests.

Flyvbjerg's underlying argument, inspired by the work of Richard Rorty and Max Weber, is that the world has been disenchanted by instrumental rationality, and the best way re-enchant the world is to focus on the relationship between values, power and rationality in the communities in which we live. If take up this task, we ought to ask ourselves "What set of values and social arrangements of power should we align our communities with?" Flyvbjerg is intentionally vague on this point because, as I have indicated, he is in favor of situational ethics that are rooted in the context of a community rather than ethical norms which are derived from a set of abstract moral principles. In other words, when Flyvbjerg talks about the power of *phronesis* to help us think and act in more value-rational terms, he is suggesting that we act in ways that embody the moral ideal of our communities, rather than a universal moral view. This is the point at which I believe Flyvbjerg's interpretation of *phronesis* begins to lose its strength. His emphasis on moral

contextualism, or situational ethics, is linked to the communitarian perspective held by philosophers, such as Alasdair MacIntyre and Michael Walzer, who are of the position that morality is embedded in the concrete practices of day-to-day life within community. Daily practices, activities and projects, they would argue, cannot be judged from a moral standpoint outside their situated context because it is precisely within their situated context that we can understand, or get-in-touch with, what makes human action moral and what does not. The problem with communitarianism is that it leaves the good to be defined by the situational ethics of an individual community, without any way of knowing whether a community's situational ethics are themselves good. This, I believe, reflects a broader trend toward moral relativism in modern society. Communitarianism, which appears to have strong influence over contemporary views on pluralism, discourages us from pursuing efforts to un-situate ourselves from our empirical surroundings so that we might guide and judge what is taking place in the world from a valid moral standpoint. This is a problem because it makes the assumption that moral relativism and moral absolutism, meaning "the view that central values exist that can be rationally and universally grounded, versus the view that one set of values is just as good as another" (Flyvbjerg, 2004, p. 291), can be resolved through situational ethics, or as Flyvbjerg prefers, contextualism.

Both relativism and absolutism are undesirable moral positions. Moral absolutism "assumes that the good is real but that it is also unambiguously knowable, and that it can be summarized in a set of commandments" (Sack, 2001b, p. 118). By making this assumption, moral absolutism creates a good that is both simplistic and oppressive. It facilitates the rise of a single moral authority and limits the ways of doing good, or being good, to a single and absolute interpretation. Moral relativism, on the other hand, assumes that the good is not real, that it does not exist independently from our mores, customs and self-interests which themselves are socially

constructed. The common concern among scholars regarding the path of moral relativism is that it will lead to nihilism, a life without reason or consequence. An equally pressing concern, however, is that relativism readily facilitates the rise of moral absolutism. Without the ability to say whether one moral position is better than another, there is “nothing preventing one group from finding it in its interest to impose its morality on everyone else” (Sack, 2001b, 118). If a moral relativist were to argue that this imposition is unjust, would be implying that the good is real and to some degree knowable.

For Flyvbjerg, our socially and historically conditioned context, which is the basis for situational ethics, “constitutes the best bulwark against relativism and nihilism” (Flyvbjerg, 2001, p. 48). I do not find this argument to be very convincing, however, because it attributes the entire basis of our moral judgments to contexts which it also assumes are beyond our control. This makes it extremely difficult, if not impossible, to hold each other accountable for our actions. Finally, because situational ethics is based on the relativity of context, it does nothing to prevent one socially and historically conditioned context, such as that of a colonial power, from asserting its moral viewpoint over others. Therefore, situational ethics is not the bulwark against moral relativism and moral foundationalism that Flyvbjerg suggests. Quite the opposite; it brings them about.

Where then do we turn as planners, social science scholars, and as movers and shakers in the shift toward food sovereignty? How might we un-situate ourselves from the relativity of our social and historical contexts to think and act in more unifying, value-rational terms, and to substantiate claims made from a universal moral view without accidentally setting ourselves on a course for moral relativism and absolutism? For Foucault, this would be a misguided pursuit, because all moral claims, including those which suggest that we can become less situated, are

themselves products of power and relative to the situated interests of those who might claim to have a clearer picture of reality (Sack, 2003). The more worthwhile pursuit, Foucault would likely argue, would be to engage in deconstructionist activities, such as Flyvbjerg's *phronesis*, that expose the relationship between power and rationality and the underlying assumptions of our values and ways of seeing the world. Indeed, Foucault spoke of his political task not as a project to show us "what is to be done", but to show us that we "no longer know what to do", so that everything which had seemed to go without saying now becomes problematic, difficult and dangerous (Flyvbjerg, 2001, p. 103). Why then, Sack questions, do post-modernists themselves make claims? Why make the claim that rationality is a product of power and that power is situated in social and historical contexts over which we have no control? Using their own logic, is this claim not postmodernists' own way of gaining power, because it implies that they see the world more clearly than the rest of us? This, Sack suggests, is one possible motivation behind postmodernism, to give postmodernists power. There is another more radical proposal, however, which Sack puts forth, and it reveals the dissatisfaction postmodernists have with their own worldview.

Pulling from the work of feminist theorist Nancy Fraser, in her book *Unruly Practices*, Sack suggests that the reason postmodernists wish to expose the relationship between knowledge, power and rationality is that they hope doing so will be morally emancipatory, that it will somehow allow our true selves to emerge (Sack, 2003). The irony is that their own worldview prevents them from articulating how. For postmodernists, the barriers to moral progress and the contributing factors to injustice in the world lie in our flawed categories and relations of power. By disclosing the situatedness of power, postmodernism seems to suggest that we can at some point free ourselves from its constraints. By doing so, we emancipate ourselves from this obstacle that has

so far prevented us from realizing our goodness as humans, unencumbered by the inherent inequalities of our society. This position, however, assumes that once we are free from the constraints of power, we will “automatically and invariably choose the good or to act out of goodness” (Sack, 2003, p. 99). Otherwise, if we continued to act in ways that were immoral or unjust, emancipation from power would be pointless. Therefore, the postmodern position, Sack suggests, also assumes that the good is real, but more importantly, that it is real in a way that is independent from the reality that we have created for ourselves, even though postmodernists refuse to make such a positive claim.

The point I wish to make, considering modern society’s clear dissatisfaction with a purely instrumental world view, is that the popular tools at our disposal for disclosing our values and moral positions i.e., communitarianism and postmodernism, are insufficient. While the two may allow us to see where our values come from, and how they are perhaps situated in context and tied to power, they avoid suggesting that we might be able to act in ways that are less situated, less instrumental and more altruistic, although they seem to wish that they could. Again, becoming less situated, more value oriented and more universally grounded from the perspective of human rights, is not only an interest expressed by modern society, it is a precursor to food sovereignty. I believe what is limiting these *isms* from making the abstract reach to a less situated worldview is that they limit their analysis to the social and the historical, ignoring what is perhaps more important, the spatial.

Flyvbjerg, in regards to planning, speaks of *phronesis* as a means to help us think and act in more value-rational terms that reflect the moral ideal shaped by our community’s social and historical context. He believes that this context is the only point of reference we have for knowing what is good and for acting in ways that are good. This position, shared by communitarians and

postmodernists, overlooks the spatial qualities of the good that become more apparent when we consider the moral implications of place-making, which geography helps to illuminate. Sack's moral geographic theory, as discussed in Chapter 1, suggests that there are two qualities or criteria of place-making that are derived from a universal, or as he prefers, an intrinsic good: "*places that expand our awareness of reality and places that increase the variety and complexity of reality*" (Sack, 2001a, p. 116). The theory suggests that when our place-making activities are guided and judged by the *joint* application of these intrinsic criteria, we move ourselves in a moral direction. Conversely, places which impoverish our awareness and restrict the variety and complexity of reality move us toward evil, or a state of unawareness and homogeneity.

It is critical that the two intrinsic criteria be applied jointly, because it assures that the places we create are "transparent enough for those inside to see out and those outside to see in" (Sack, 2003, p. 25). Here, seeing and transparency refer to the criteria of awareness. Variety and complexity ensure that no place is so porous and transparent that "no serious projects can be undertaken" (Sack, 2003, p. 25). Most importantly, the joint application of awareness, variety and complexity, helps to ensure that we do not fall victim to moral relativism or moral absolutism. It firmly asserts that our criteria for judging places and projects should be whether they move us towards, or away from, a heightened awareness of the real and the good. Therefore, it avoids moral relativism by discouraging judgments based on instrumental criteria, or criteria which do not account for the real and the good. It avoids moral absolutism because we can make ourselves and others more aware of the real and the good in an infinite number of ways. In other words, there is not set of commandments on how to enrich reality. In Chapter 5 I will expand upon the real and the good and their connection to geography. I will also discuss the implications that this theory might have for guiding the *positive* aspects of food sovereignty: those projects aimed at bringing

about a meaningful right to food through place-making, from the bottom-up rather than from the top-down as the right to food has traditionally been constructed.

Chapter 5: A Moral Geographic Theory

The Real and the Good

Sack's moral geographic theory is built on four sets of arguments concerning free will, the real, the good and that the good, is compelling – that it attracts us. From within these arguments emerges a great deal of insight about the power of place. It is important to keep in mind, however, that while geography helps to illuminate the profound effect that place has in shaping our lives and society, Sack's theory rests on our ability to think ourselves outside of place, to become less situated, so that we can know whether the places we create are good and strive to make them better. This is where Sack's theory departs from the postmodernist view of geography, and I begin with a discussion of his arguments concerning free will.

Central to any moral theory is the ability to choose. Our actions cannot be considered moral, nor can we be held responsible for our actions, if they are chosen for us either by genetic impulses or social forces. The concept of *lebensraum* or “living space”, for example, was used by Adolf Hitler to justify the “natural” expansion of the Nazi Reich and the extermination of the Jewish race. If *lebensraum* were a natural tendency, we would not be able to condemn the horrors perpetrated by the Nazi regime because they would not be responsible for choosing their actions. Similarly, if the creation of Jewish ghettos were entirely attributable to the social forces within Germany at the time, we could not say that the ghettos were immoral places. The choice to build and maintain them would simply be attributed to unfortunate social and economic conditions. The theory does not deny that natural and social forces exist and that they influence our actions, but it maintains that we have the ability to choose to do otherwise. To be moral agents working consciously to make the world a better place, we must possess some degree of free will. Sack sees

the unlimited and creative potential of our free will most clearly in our role as place-makers and users, just as we are language makers and users.

The theory's second set of arguments concern reality. It maintains that reality exists, that we are drawn to it and that we are compelled to know it more fully. But like an ever receding horizon, the real is always beyond our grasp (Sack, 2003). Nevertheless, our contributions to reality, such as our political borders, our national parks and our cities are just as real as the parts of reality that we did not create, such as the oceans, mineral deposits and the atmosphere. In other words, we are constantly contributing to, affecting and changing reality through place-making, but our knowledge of reality is always and necessarily partial. The theory also stresses that reality is infinitely complex, and that aspects of reality can be accessed from an infinite array of scientific, cultural, spiritual and artistic perspectives. All of these perspectives can shed light on certain aspects of reality through different avenues of inquiry, but none can provide an absolute picture of what reality is. In this way, Sack separates himself from the positivist tradition within social science and geography which assumes that reality can, at some point, be fully known by pursuing a purely epistemic view. According to the theory, and similar to the ideas put forth by Flyvbjerg, the epistemic view represents only one of the many narratives through which reality can be described. It is certainly not the only narrative, nor the best narrative for the task. A final argument regarding the real is that although we are compelled by it, not all aspects of the real are good. As we continue our pursuit to become more aware of the real, our curiosity will inevitably reveal, as it has in the past, aspects of reality that might draw our curiosity, but that are in fact evil. Fortunately, because we have free-will, we can choose what to do when presented with options for acting in ways that are evil. We can consciously decide to make places that bring us closer to the good. In order to do so, however, we must have an intimation of the good.

The theory's third set of arguments are its most significant and perhaps most contentious. The argument is that we are capable of making choices and judgements that are independent of our empirical conditions. For this to be possible, the good must be real and a part of reality, but also independently from reality. This makes it possible for us to base our choices and judgments on an independent and intrinsic good that we manifest and make real through our actions, but that we ourselves did not create. So, the good is real, and through place-making, the good can be brought about in innumerable ways and made to affect reality, but the good is not a product of reality and our understanding of it will always be incomplete. These assertions are significant because they substantiate our free-will. If we assumed instead that the good simply arose from our empirical conditions, out of self-interest, there would be nothing to suggest that we were autonomous, let alone moral agents. Similarly, if we assumed that the good could be known absolutely or that the good could be accessed by following a single set of commandments, we would limit, if not end our capacity for moral progress. Indeed, Sack argues that for progress to be meaningful, it must act as a lure, pulling us in the direction of a goal that is ultimately unattainable (Sack, 2002, p. 113). Attainable, or instrumental goals, are of course necessary for meeting the needs of day to day life, but if they are not accompanied by more demanding unattainable goals, then we would limit our capacity to envision and pursue meaningful progress. Sack argues that "the most worthy yet unreachable goal is a heightened awareness of the real and the good" (Sack, 2002, 113).

These arguments, that the good is real and a part of reality and yet independent of empirical reality, may be troubling for some. Simply referring to the good in the singular likely raises red flags for those concerned with moral theory devolving into moral absolutism. This is why the ineffability of the good is critical to the theory. It maintains that there are infinite paths to bring us

closer to the good, for this is how we achieve progress, but that no path is ever capable of arriving at the good absolutely, for this would effectively end the possibility for progress. In this way, the theory avoids absolutism because the good is ineffable. Critics of moral theory generally give less concern to the possibility of moral relativism because it is assumed that relativism will lead to openness and acceptance in the world. As I have already demonstrated, however, relativism paves the path to absolutism by eroding the basis for our moral decisions and our capacity to stand up against absolute moral positions. Therefore, it is of great importance that the theory and its intimation of the good also help us to avoid the path toward relativism. It helps us to do this by giving morality a sense of direction. In other words, the theory points us toward the real and the good by maintaining that we ought to create places which expand our awareness of reality and the variety and complexity of reality. These intrinsic criteria act as guideposts to the good. The theory avoids taking a morally absolute position because it does not prescribe ways in which to make a more aware, varied and complex world. By maintaining, however, that we ought not to create places which diminish the awareness, variety and complexity of reality, the theory also avoids taking a morally relative position. Put another way, the theory's two guideposts point our place-making activities in the right direction, toward the real and the good, but the choice to move in that direction, and in what way, is entirely our own.

The theory's fourth set of arguments concern this last point – that it is our responsibility as moral agents to choose to become more aware of the real and the good. Since the good is real, the theory maintains, we are drawn to it and compelled by it. It is the reason we strive to uphold human rights, create institutions of higher learning, invent cures for diseases that our own communities do not suffer from and help our neighbors without expecting anything in return. Unlike the real, which also compels us with its negative qualities, the good beckons us in a limitless and

intrinsically positive direction. We do not, however, exercise our free will and moral agency by merely accepting the good for its compelling qualities. If this were true, we would always choose the good because the good is infinitely attractive, but although the good is infinitely attractive and compelling, so too is it infinitely demanding. Therefore, we exercise our free will as moral agents not when we accept the good, but when we make the effort to increase our awareness of the good. The theory then places moral responsibility on both individuals to increase their awareness of the world around them, and on society increase our opportunities to become more aware (Sack, 2003).

These are the main arguments of the Sack's moral geographic theory – that the real and the good exist, that neither can be known fully, that we can choose to become more aware of them by creating places which expand our awareness of reality and the variety and complexity of reality, and that we are compelled to do so, but that this requires the effort of both individuals and of society. These arguments concern the real and the good and their connection to geography. They do not stand to replace other moral theories which might draw different connections to the good and they are certainly not meant to be adhered to absolutely. Sack is adamant that any moral theory, including his own, be adopted provisionally and with a healthy dose of skepticism. Nevertheless, I find Sack's theory to be uniquely practical in the sense that it grounds what we might call its categorical imperative – awareness, variety and complexity – in our day to day place making activities (Sack, 2003). Its ability to navigate between moral relativism and moral absolutism is also encouraging and crucial if moral theory is to play a larger role in modern society. These practical qualities suggest the theory is well suited to help guide place-making and planning activities aimed at bringing about food sovereignty.

As I have discussed, food sovereignty is rooted in the particular struggles of food producers and consumers to define their own food, agriculture and trade systems and policies. It rejects the

assumption that corporate-controlled, market-based research is the best approach to innovative plant breeding in the face of climate change and food insecurity. For these reasons, much of the literature on food sovereignty suggests a return to national, regional and local values in regards to food production, consumption and plant breeding. This emphasis on the particularity of our values and interests in food systems can overlook the moral universality required to make the right to food sovereignty meaningful. It sets us on an ethical path more akin to communitarianism which orients our values inwards, and limits our capacity to guide and judge from a less situated, more abstract, but nevertheless real moral position.

This capacity to guide and judge is the next aspect of Sack's moral theory that I will discuss. It sheds an important light on our geographic condition – that we continuously transform reality through place-making to better reflect our image of what we think reality ought to be. It helps us to not only better understand this condition, it also helps us to judge whether the places we create are themselves good; whether they are guided by intrinsic geographic judgments. The implications of this capacity to guide and judge from the stand point of an intrinsic and ineffable good are profound, not only for food sovereignty, but for society writ large. In the following section I will discuss how our geographic condition might be better understood and guided through the theory's two core concepts; instrumental and intrinsic geographic judgments. It is through the articulation of these core concepts where useful connections can be made between Sack's moral theory, Flyvbjerg's theory of *phronesis*, and the normative ethical theories within the field of planning.

Instrumental and Intrinsic Judgements

While moral theory depends on our ability to choose, Sack's moral geographic theory begins with that which we have no control over, our geographic condition. Simply put, we cannot take on the projects necessary to our survival and growth without carving out places for those projects to take place in. Therefore, we cannot exist in the world without also transforming it. There is little debate about this point, but there are innumerable contrasting opinions about what it means for our capacity to be moral. I have highlighted the communitarian and postmodern position which are reflected in the work of Bent Flyvbjerg and his take on Aristotle's theory of *phronesis*. In regards to our geographic condition, these positions would suggest that as we transform the world through place-making, we do so not with an intimation of an intrinsic and ineffable good, but from a situated understanding of the good molded by the context of the communities to which we belong. From this perspective, the justification for a place and the criteria for its evaluation are based on its effectiveness at meeting the intended outcome of our individual or community projects, projects which we have a stake in, and would like to see succeed. This may serve as a basic definition for instrumental geographic judgments. Of course, to a certain degree, instrumental judgments are necessary. This is because to be human, we must take on projects, and to take on projects, we must transform the world so that we have places for our projects to take-place in. Therefore, it should make sense that we would like to see our places help us to achieve the intended goals of the projects that we choose to undertake. If this is where the justification for place and its criteria for its evaluation end, however, we effectively relativize the moral quality of our places and projects, because what is good about them is dependent on our situated judgement.

Why, though, is this problematic? As Sack explains, places can be instrumentally good, that is to say, effective at meeting the desired outcomes of their projects, while at the same time

producing what the rest of the world would likely find to be morally abhorrent. Moreover, evil places, like concentration camps and slave plantations, might very well be considered moral by their creators. Concentration camps, for example, worked effectively towards the Nazi goal of racial purity, which they thought to be truly good. Slave plantations were seen by slave holders, and certain groups of antebellum society, as effective instruments to bolster the agricultural economy, as well as moral instruments to control what was assumed to be an inferior race. Instrumental judgments, in other words, do not require a correct interpretation of the good (Sack, 2003). They merely require that places facilitate projects which are deemed to be good based upon the situated moral view of those who created them. This last point helps to convey the circularity of instrumental geographic judgments. Their criteria for judging whether a place is working well, is held to no other standard than the goal of the project it was designed to facilitate.

Intrinsic geographic judgements help to break the circularity of instrumental geographic judgments by holding them to an independent moral standard, which is itself defined by an intrinsic and ineffable good. Like instrumental judgments, intrinsic judgments evaluate the use of place as an instrument. Instrumental judgments, however, see place as an instrument to *achieve* the desired outcomes of self-interested projects, whereas intrinsic judgments see place as an instrument for enriching reality (Sack, 2009). In other words, instrumental judgments are used to achieve outcomes that may or may not make us more aware, but that certainly work in favor of our self-interest. Intrinsic judgments, on the other hand, tell us whether our instrumental judgments are guided by intrinsic goals – to create places that freely provide heightened awareness of the real and the good. In this way, intrinsic judgments do not tell us what the good is, nor how exactly to get closer to it, only that we are moving in the right direction, or not. In Sacks own word, intrinsic

judgments act as a “geographical guide for judging the moral quality of places” (Sack, 2001a, p. 116).

That Sack’s moral geographic theory stresses our capacity to make moral judgments, might lead some to believe that his theory is entirely substantive. Substantive ethical theory applies normative ethical principles to judge the goodness of our actions, projects, and institutions (Harper & Stein, 1992). I would argue, however, that similar to Rawlsian and Kantian ethical theory (as referred to in Harper and Stein 1992), Sack’s geographic theory is both substantive and procedural. Procedural ethical theory concerns the process by which ethical principles are justified. Within Rawls’ ethical theory, the procedure for justifying ethical principles is based on the *veil of ignorance*. This idea suggests that ethical principles are those “which would be chosen by rational self-interested persons if they did not know their own position in society” (Harper & Stein, 1992, pp. 108). If we accept Rawls’s ethical procedure, we would then choose to implement his two substantive principles concerning *liberty* and *equality*. The essential idea of these two principles is that each person be granted equal rights in regards to social, economic and political opportunities and that these rights be of greatest advantage to the least-advantaged members of society (Harper & Stein, 1992). Within Kant’s ethical theory, as interpreted by Harper and Stein, we see a similar means to for arriving at just ethical principles. According to Kant’s *categorical imperative*, just ethical principles would be those that could be universalized and recognized by all persons as just basis for action. For example, an environmentalist might argue that it is unethical for Americans to take a private vehicle to and from locations that they could just as easily get to if they were to car-pool, walk, bike or take public transit. This is because, if all people were to replicate this degree of individual motorized transport, human and environmental health would be put at great risk in a short period of time. Kant’s Categorical Imperative is then substantive in the same way as the

“golden rule” – that you should do unto others as you would like them to do unto you. In these ways, neither Rawls’s nor Kant’s ethical theories specify what principles nor actions are good, however, they provide frameworks for evaluating whether our judgements violate certain ethical principles, or if they are guided by them.

Sack describes the joint application of the theory’s intrinsic judgments as a sort of geographic categorical imperative. They provide us with the means to judge whether a place is helping us to see through to the real and to create a more varied and complex world, but they do not specify what seeing through to the real, and variety and complexity, ought to look like on the ground. They cannot and should not, Sack argues. They do help us, however, to assess whether places and projects violate these two intrinsic criteria. Consider, for instance, the following project being conducted in Guatemala by *Mercy Corps*, a partner in innovation with FTF. Mercy Corps is working with seven agricultural companies to introduce the crop traceability software Farmforce to over 3,000 smallholder farmers. Farmforce provides an alternative to pen and paper recordkeeping and provides full electronic traceability of crop location and pesticide use. This makes it easier for smallholder farmers to comply with exporting standards. Following the theory’s two intrinsic criteria, it could be argued that Farmforce is increasing awareness in places of production by making the production process more transparent. It might also be argued that they are increasing the variety and complexity of places of production by making it easier for smallholder farmers to participate in the country’s export economy, an economy historically dominated by large and homogenized landholdings. It seems likely, however, that because Farmforce is developed by the agrochemical company Syngenta, that farmers who adopt this technology will likely also adopt Syngenta’s improved seed varieties. If this turns out to be the case, the project and its places of production will separate smallholder farmers from the plant

breeding process, thus reducing awareness. Moreover, it will likely limit production to a few improved varieties of non-traditional export crops, thus diminishing the variety of crops being grown and the complexity of the processes, both cultural and technical, by which the land is cultivated.

In these ways, the theory's intrinsic criteria can assess what is both procedurally and substantively just. Ethical principles are unjust if the theory finds them to be guided solely by instrumental judgments. For example, if FTF's ethical principles are guided primarily by an enlightened self-interest e.g., helping food insecure communities by creating a need for their partner's private technology, rather than a sense of altruism e.g., helping food insecure communities to reclaim the reproductive capacity of native seed within their region, the theory would see their ethical principles as misguided. Similarly, if the substantive actions taken in this project are found to create places which impoverish awareness and diminish the variety and complexity of reality, they too would be unjust. The importance of intrinsic judgements, however, does not end with their ability to assess whether places and projects are morally supportable. They are also a means for animating what it is that we do with our geographic condition. If we must transform the environment by creating places to take on projects, intrinsic geographic judgments help us to realize that although our place-making activities are certainly influenced by context and power, we are not completely beholden to either. If this were not the case, if our judgments and actions were entirely products of the empirical, our geographic condition would not change but it would proceed without direction. We would create places without knowing whether they are good or bad. Morality would be relative and progress would be futile. Fortunately, because the good is real, and because we can choose, our places and projects do not need to be directionless or relative.

Intrinsic geographic judgments act as a compass pointing our geographic condition toward the real and the good, although it takes effort to move in this direction.

For some readers of Sack's work, this direction toward a more aware, varied and complex world might seem unclear. This is partially the theory's intention, to allow for infinite ways to move towards the good. It should be noted, however, that while the theory's two criteria for intrinsic judgements gives our ability to choose much latitude, the undercurrent of the theory does steer us in a discernable path. It brings our instrumental or self-interested judgments more in line with intrinsic or selfless judgments. In other words, it steers our geographic condition towards altruistic motivations and away from instrumental motivations.

It is at this point where Sack and Flyvbjerg connect and diverge in two important ways. Flyvbjerg speaks of the need within social science and planning to shift the rationality of society from instrumental-rationality, characterized by self-interest and the virtues of *episteme* and *techné*, to value-rationality, characterized by situational-ethics and the virtue of *phronesis*. Flyvbjerg and Sack share similar views on instrumental rationality, which has much in common with instrumental geographic judgments. Both see instrumental rationality as a truncated and circular form of logic, holding itself to its own standards without the ability to objectively convey its own verisimilitude. Where Flyvbjerg sees value-rational or intrinsic judgments as necessarily situated in the relative context of a group's ethical view, however, Sack sees the joint application of the two intrinsic criteria as constitutive of a good that is real and un-beholden to social construction. To hold this position, Sack argues, does not require a God or any sort of spiritual or religious credence, "it simply asserts what seems to be obvious – that reality has multiple facets, some of which are more or less accessible, and not all of which can be known in the exact same way" (Sack, 2003, pp. 83).

To end here, with the argument that creating a more aware, varied and complex world leads us in the direction of moral progress, would suffice as a moral position in most fields. Importantly, Sack argues that intrinsic geographic judgments are not restricted to the field of geography. This is because creating a more open, varied and complex world is a pursuit celebrated by many fields within the natural and social sciences. Nevertheless, the “geographic” of intrinsic geographic judgments calls our attention to a vital component of our geographic condition that remains to be discussed. That is, when we transform reality according to the ideas about what we think reality ought to be, we not only invoke a particular moral position, we also materialize our moral position through the instrument of place.

We can think of place as an instrument because it is dependent on our agency to produce an effect, but we cannot be effective without it. In the same way that language is dependent on us as speakers and listeners in order to facilitate communication, so too is place dependent on our agency and engagement in order to facilitate the projects we undertake. We exercise our agency as place-makers when we circumscribe an area of space so that we may control what goes on inside, and we engage place when we affirm or contest the rules by which it is constituted. A place may be as ordinary as a home or school, with implicit and explicit rules about what is and what is not allowed to take place inside. A place may also be as significant as an entire nation, a refugee camp, a national park, or city under siege. Despite human civilization beginning with a few isolated places scattered across a sea of ‘space’, there is now virtually no space left on Earth that is not a place. When we create places today, we are most certainly transforming, destroying or replacing an existing place and its corresponding rules with yet another place with its own set of rules and moral inclination.

Much of the academic aim in geography has been to demonstrate that the use of place is really an exercise of power. Geographers often reveal how the structure and dynamics of place are sequestered by those with ideological, political, economic or military power to maintain control. This focus lends insight to the power of place, such as how place may be constructed and used by some to control others or to simply pursue a group's instrumental goals. I have pointed to this purely instrumental use of place in discussing the patenting of seed genome. By disseminating this restricted-use technology to aid recipients in the Global South, multinational agrochemical corporations erode and eventually eliminate the places which have for millennia facilitated projects responsible for the evolution of the world's genetic resources. These places are replaced with a few, homogenized places of production, instrumental to the ideological and economic interests of multinational corporations and global trade institutions. As I have demonstrated in Chapter 2, institutions like the WTO, which are responsible for upholding the legal mechanisms that support the privatization and restricted use of seed genome e.g., UPOV 91 and TRIPS, hold tightly to the belief that poverty and hunger are best addressed through the dissemination and adoption privatized technology. These sorts of inquiries into the power of place, while useful in the identification of key actors, can perpetuate the idea that place can only be used instrumentally to achieve our own self-interested goals. Geographers, in other words, have given much less attention to the possibility that our place-making activities might also be guided by intrinsic judgments and the outward impulse of altruism. Said differently, place not only enables us to be effective at achieving our instrumental goals, it also enables us to be effective at making moral progress.

The popular focus on power, apart from leading us to believe that the moral is completely situated in the empirical, also tends to direct our attention to who, or what institution, is controlling the structure and dynamics of place. In doing so, we distract ourselves from the fact that whoever

is controlling place is of secondary importance to the actual mechanism by which place is controlled. For the mechanism of place does not change from one system of power to the next, rather it is the use of place that differs. That is to say, if we wish to contest systems of power and to transform, destroy or recreate place, no matter who we might be or what we might stand for, “we must use the same mechanisms that allow place to be constructed, but in the other direction” (Sack, 2001, p. 115). Therefore, it is arguably more important that we be able to evaluate the aspects of *how* place is used, rather than trying only to reveal *who* place is being used by and what their self-interested pursuits may be.

In order to conceptualize the instrument of place, Sack has developed a model which depicts place as a loom allowing us to weave together elements of both the empirical domain of reality and the moral domain. As you might imagine, the empirical domain relates to our instrumental view of the world and self-interested projects, while the moral domain relates to our intrinsic view and altruistic motivations. Dominant discourses of power suggest that the empirical domain informs decisions in the moral domain, because the assumption goes that we are situated beings and that our empirical context is our only point of reference for moral judgment and action. In the following section I will illustrate Sack’s essential argument that it is in fact the moral domain that informs and animates the empirical. In presenting this argument, I will expand upon the mechanics of the loom, the realms which constitute the empirical and the moral domain, and how these realms are woven together by the loom to yield the tapestry that is our collective moral landscape.

The Structure and Dynamics of Place

The analysis of place differs from other forms of analysis, such as that of an ecosystem or a national economy, because whereas these systems may be reduced to the microbiological or the local scale, place is non-reducible. It is of course true that places and the projects they enable are created at different scales and often change scales. A certified organic coffee cooperative, for example, might begin at the local scale involving a single community. Over time, it might jump scales to encompass growers in other communities, thus becoming a regional operation. At the same time, the cooperative might gain recognition amongst buyers in other countries for its sustainable and ethical business practices, thereby connecting one place at one scale to an entirely different set of places and scales. But while the scale of place might change, the indispensable quality of place does not. No matter the project, system or plan in question, the fact of the matter is that place, like language, is required for virtually any and every human undertaking. For this reason, Sack argues that “these issues of scale are all dependent on how places work and their connection to projects” (Sack, 2001a, p. 113). That place is indispensable and non-reducible has significant implications for how we understand what it means to “make progress”. It implies that the structure and dynamics of place – how place works – are not only present in any and every place we create, they also function in the same way regardless of scale and context. So, while we use places to take on a variety of projects at varying scales and in varying contexts, Sack argues that our use of the structure and dynamics of place can be evaluated by intrinsic geographic judgments to assess whether our use of place either contributes to or detracts from moral progress in the universal sense. What this means for human progress in the aggregate is rather straightforward but its significance cannot be overstated.

It means, as Flyvbjerg and others have argued, that our scientific, technical and instrumental progress is secondary to, and only as good as, our moral progress. The theory, however, takes this argument a step further. Moral progress, it argues, is not only the essential human project, but our efforts to move in its direction can be evaluated based on whether our uses of the structure and dynamics of place either enrich or impoverish reality. This position calls into question the common approach of the Global Food Security Strategy to evaluate progress based on instrumental goals, such as those described in the FTF Indicator Handbook (Feed the Future, 2013). For example, FTF measures progress based on the number of hectares of land under improved technologies (Indicator 4.5.2-2), and the number of farmers and others who have applied improved technologies (Indicator 4.5.2-5).

It demonstrates that instrumental goals, even those which might boost agricultural productivity or market access, can be achieved immorally and in ways that impoverish our awareness of reality and diminish the variety and complexity of reality. The elimination of pain, hunger, and suffering, in other words, can be achieved through sedation, dominion and control. And so, this position helps us to understand that without intrinsic judgments, without an intimation of the good, we will continue to create places and take on projects, but we will do so without knowing whether the places and projects we create are themselves good. And this, Sack argues, is precisely the reason why geography demands to know the positive, because “to make places without knowing if they are good is to run the grave risk of making the world worse than it needs to be” (Sack, 2003, p. 80).

This positive outlook on the structure and dynamics of place, and the prioritization of intrinsic judgments and moral progress, also gives clarity to the central idea that unites food sovereignty scholars and activists, that only through activities which instantiate moral

universalism, a “necessary precursor to the formal cosmopolitan federalism that the language of rights summons” (Patel, 2009, p. 670), will we come to know food sovereignty, and only through food sovereignty will we come to know food security. These morally universalizing activities, I argue, are precisely those which, at their root, make use of the structure and dynamics of place in the same ways that Sack advocates in his moral geographic theory, in ways which expand and enrich reality rather than in ways which contract and impoverish reality. Interestingly, the connection between the use of place and moral progress has not been articulated by food sovereignty actors. It is my belief that a new and open dialogue concerning the distinction between moral and instrumental progress, and the role of place in advancing both forms of progress, is not only needed, but indispensable to understanding the fundamental differences between food security and food sovereignty. In the following sections, I will substantiate my position by discussing how structure and dynamics of place work and how its loom-like qualities are used to advance both instrumental and intrinsic goals.

The Empirical and the Moral Domains

If we think of place as a loom, we can start to imagine how we, as place-makers and users, might weave certain threads of reality into the places we create. According to Sack’s model, these threads of reality are derived from two domains, the moral and the empirical. Both domains are woven into place simultaneously, but whereas the postmodern geographic perspective would have the moral domain informed by the empirical, the existence of a good suggests that the moral domain can and ought to inform the empirical domain. To better understand the nature of this position, it helps visualize the place as a loom. The empirical domain weaves together elements of meaning, nature and social relations. These three realms constitute the essential elements of reality that we put to use when creating places to take on projects. Therefore, the fabric of each place we

create contains threads of meaning, nature and social relations. Some threads, however, are featured more prominently than others depending on the purpose of the project for which the place is being used.

The Empirical Domain

Consider a community shelter for the homeless. The most prominent elements of nature include extreme temperatures as well as the rain, wind and snow, which force homeless individuals and families to seek shelter. But elements of nature might also include the illnesses, as well as the mental and physical injuries, that disproportionately affect the homeless and which case managers at the shelter help their guests to address, treat and manage. Elements of meaning are found in the counseling programs available at the shelter to help individuals and families better understand and grapple with their situation, their needs and their goals. Elements of nature and meaning are constantly being woven into the shelter but they work in support of its primary focus, the realm of social relations and the successful reintegration of homeless individuals and families back into the larger community.

Nearby the community shelter is the county jail. And similar to the community shelter, the primary focus of the jail is within the realm of social relations, with the realms of meaning and nature working in support of this more specific focus. Although the jail and the community are entirely different from one another, as places, they both allow us to weave together elements from each realm in such a way so that we may prioritize one in order to take on specific projects. In fact, all places share this commonality, “but each type of place does so with different elements and proportions” (Sack, 2001, p. 109). Churches and universities, for example, weave more elements from the realm of meaning, but unless we are referring to an openly religious university, the elements of meaning that they incorporate are likely very different. In a similar way, both private

and community based plant breeding operations focus on the realm of nature for drastically different purposes. Place helps us to interconnect and weave elements of meaning, nature and social relations, and therefore, it allows us to produce the effects we wish to see in the world. For this reason, place is an indispensable tool for virtually everything we do. So far, I have discussed the realms of the empirical domain and that elements from each realm may be woven into place in different ways to facilitate any number of projects. Next, we will look at how the elements of meaning, nature and social relations woven into place.

The Structure of the Loom

Sack identifies three loops, or causal circuits, that constitute the structure of the loom. Each loop is associated with a realm, and weaves elements of that realm into place in accordance with a set of rules. The realm of social relations is woven into place by the in/out loop. The in/out loop is a set of both implicit and explicit rules about “what may or may not take place” (Sack, 2001a, p. 109). In the community shelter, explicit in/out rules apply to those guests who have acted violently or inappropriately on the premises of the shelter. Those guests may be revoked their right to enter the shelter even in adverse weather conditions. Explicit in/out rules also apply to the community shelter in the form of zoning laws, which have forced the shelter to relocate next to the county jail and far away from the city center where the homeless are implicitly excluded, again by in/out rules.

Nature is woven into place by the spatial interactions loop. This loop represents the flows that are expected to occur within place as well as between places. Spatial flows are often understood as elements from the natural realm, such as the temperature, wind and humidity. There also exist, however, spatial flows of people, diseases, pesticides and cross-fertilization. We often model and anticipate these flows because we recognize that they move from one place to the next,

thus demanding our attention. In the community shelter, extra beds are made available during the winter months for the anticipated increased flow of guests. The extreme cold and snow also represent spatial flows which are anticipated during this time of year, and these flows are prevented from disrupting the shelter's project by the insulation, furnace, space heaters and the back-up generator used in the building. The community shelter represents a place dealing with spatial relations at the scale of a single building, but spatial relations are woven into place in the same way regardless of scale. At the national scale, for example, a civil war or natural disaster in one corner of the globe may cause a nation to attempt to change their spatial interactions loop between themselves and the affected country. Depending upon their use of instrumental and intrinsic judgments, they may choose to limit the flow of people from the affected country, or increase and facilitate the flow of those fleeing from places of violence, war and persecution.

The in/out loop and the spatial interaction loop, the loom's two causal circuits of rules and flows, interact to create a façade, or the surface of place. Sack also refers to the surface of place as its landscape or appearance. When we analyze a place, we see how place-makers, perhaps ourselves, have made use of rules and flows to create a place that works in support of a specific project or a set of projects. In the community shelter, we see that rules and flows have been put to use in a number of ways: to keep some people out, while allowing other in, to accommodate for the weather and for the increased number of guests during certain times of the year, to prevent against the spread of illness and to provide access to healthy meals, medication and case-managers. What we are analyzing here is the outward appearance of the community shelter and the meaning that it conveys. The community shelter's outward appearance presents itself as a place that provides homeless individuals and families with a path to a better and more secure future. We hope this is true and it may very-well be. However, because we understand that the outward appearance,

or surface, of the community shelter has been created through the use of rules and flows, we can question and challenge its appearance “in terms of not being what it claims to be” (Sack, 2001a, p. 110).

The third loop of the loom allows us to question and challenge the appearance of place. This is the surface/depth loop and it weaves the empirical realm of meaning into place. As the name implies, the surface/depth loop calls into question what is occurring behind the outward appearance of a place, whether what is shown on the surface reflects what is really going on inside, and whether the inner workings of the place reveal any depth, or if the place is thin and hollow in its meaning. If we invoke the surface/depth loop only to find that the community shelter does not provide the quality of services that it claims to, if counseling programs are disorganized and infrequent, if meals are of low nutritional value and served irregularly and if guests rarely get back on their feet, we have problematized the very meaning of the community shelter. We have also problematized, however, the elements of nature and social relations by which the community shelter is constituted. This point is critical to understanding the structure and dynamics of the loom. When one loop or causal circuit is activated, changes are bound to occur in the other loops, thus creating a chain reaction affecting how the elements of meaning, nature and social relations are woven into place.

Although in/out rules are most readily applied to the realm of social relations, they also socialize the realms of meaning and nature. In the community shelter, guests are not allowed to consume alcohol or illicit drugs, although these substances might be used by some guests as a way to seek meaning. In this place, however, these pursuits of meaning are socially unacceptable, they are not allowed in. The same is true for elements of nature. Outside the community shelter, insects and rats are of no concern. When they enter into the community shelter, however, they become

pests and their potential to carry disease causes employees to take further action to make sure that they are excluded from the shelter. Once outside, they return to the status of insects and rodents. In this way, the spatial interactions loop *socializes* elements of meaning, nature and social relations, but this process also works in the other direction. The spatial interaction loop *naturalizes* elements of all three. It highlights the fact each realm has material qualities that must flow through space. While the surface/depth loop *problematizes* elements of all three by allowing us to challenge the appearance that they create and the meaning this appearance conveys.

To emphasize this last point, consider an organic coffee cooperative in the Western Highlands of Guatemala. The cooperative holds regular tours throughout the year to show visitors the different stages of coffee production. The primary focus of these tours is on meaning. To answer the visitors' questions, "Where does my coffee come from?", "How is it grown?", but the cooperative is also imbued with elements of nature and social relations. Upon acknowledging this, we might be led to ask whether it is natural to be growing coffee in this region, or whether this simply represents the cooperative's understanding of what is natural. We might also wonder whether our own presence in the cooperative, observing farmers at work, buying coffee and t-shirts to take home as souvenirs, is really a means of entrenching preexisting relations of power between ourselves and the coffee farmers. If the cooperative were to activate the in/out loop to include the cultivation of native food crops, this change would activate the loops of spatial interaction and surface/depth. A change in the rules of in/out would likely lead to a change in the flows of natural and social elements, and a change in flows would then likely alter the appearance of the cooperative, therefore, changing its meaning.

Changes in one loop tend to activate changes in the others because each loop is a variant of space. "Each simply reworks space so that it can engage the material of that realm" (Sack,

2001a, p. 111). The in/out loop reworks space to convey power, the spatial interactions loop reworks space to function in accordance with natural laws, such as movement, germination, temperature, energy and distance, and the surface/depth loop reworks space so that it can take on meaning and become a part of our awareness. This is how the structure and dynamics of the loom operate and this is also true for the moral domain. Before shifting the discussion to issues of morality, I should reiterate two important points regarding place and its loom-like qualities. The first point being that each place possesses, is operated by, and produces these loom-like qualities as well as elements of meaning, nature and social relations. These qualities allow place to produce an effect, and through our agency over place they allow us to be effective at taking on projects. Therefore, it would be unwise to evaluate a project for its instrumental or intrinsic value without also considering the place, and the qualities of place, within which and by which the project is produced. The second point has to do with power and with contesting and changing place. This topic represents the clearest alignment of Sack's work with the moral foundations of food sovereignty.

Food sovereignty, Patel writes, requires egalitarianism as a prerequisite (Patel, 2009, p.670). This implies that food sovereignty is not only critical of existing power structures, but that it seeks to change them. As we have seen, power is woven into place through the realm of social relations and rules of in/out. The loom that place provides, however, not only allows us to weave power into place, it also allows us to unweave power using the same mechanisms but in reverse. There are many examples, both past and present, where activists and non-activists who were likely unaware of the structure and dynamics of place nevertheless exhibited an intimation of how its loom like qualities can be used in reverse to challenge existing power structures.

During the American Civil Rights movement, African Americans who were excluded from white-only establishments staged sit-ins, sometimes alongside Caucasian allies, to challenge the power-structure established by Jim Crow segregation laws. They transgressed space to upend a clearly unjust use of place. More recently, women in Saudi Arabia are contesting the social code against women driving by occupying the driver's seat. In fact, in countries around the world, women are regularly contesting power structures by pursuing careers in the fields of science, technology, engineering and math, where they have been both implicitly and explicitly excluded for centuries. In my own public library, public officials and employees challenge the implicit in/out rules of the city by creating and supporting a place in the heart of town where citizens of all backgrounds, income levels and housing status, are encouraged to gather, interact and, of course, read.

Existing power structures are also contested by using the loom to challenge the flows and appearances of place, as when over three hundred Native American tribes ended construction of the Dakota Access Pipeline which stopped the flow of oil underneath a section of the Missouri river, half-a-mile north of the Standing Rock Sioux reservation. The challenge to existing power structures can be leveled at the meaning, spatial interactions and social relations of place. Therefore, "a knowledge of the workings of place is especially important to those who are critical of existing power structures" (Sack, 2001a, p. 115). This brings us to the final point that I would like to reiterate. When it comes to challenging and changing existing power structures, the most important project is not in identifying who controls the loom, for this does not provide us a positive understanding of what to do about it. The more important and certainly more radical project is in understanding how the loom works so that existing power structures cannot merely be exposed, but also unwoven and replaced by a better use of place. So far, we have discussed how the loom

works. It weaves together elements of meaning, nature and social relations with rules, flows and spatial interactions. The loom can be used to weave and unweave, create and contest. Finally, knowing how to pull the threads of the loom is more important than who is pulling them.

The loom's empirical domain deals primarily with the first half of our geographic condition – that we cannot accept reality as it is and so we create places to transform reality. In the following section, we will look at the last portion of our geographic condition – that we transform reality into what we think it ought to be. This aspect of our geographic condition concerns, once again, our intimation of the real and the good, the distinction between instrumental and intrinsic judgments, as well as the second component of the loom, the moral domain. What this section will help to illustrate is a positive view of how to make our instrumental and self-interested uses of place more intrinsic, thus imbuing place with an altruistic or gift-like quality. This tactic represents the theory's positive answer to questions of power and injustice, which Patel and others see as a fundamental roadblock to food sovereignty and food security, and which geographers, planners and social theorists often lament; they fail, however, to articulate solutions.

The Moral Domain

That a moral domain exists, is not a central focus of debate. Put simply, it is the domain of reality in which our conceptions of meaning, nature and social relations are rooted. The point of contention arises from the question of whether the moral domain is relative, or if it is guided by an intrinsic good. As I have already demonstrated, Sack's theory assumes a critical realist position arguing that the real and the good both exist but that our knowledge of them is necessarily partial and incomplete. This is partly because human consciousness is a natural fact. The universe can transcend our awareness of it, but our awareness cannot transcend the universe. This is also true, however, because the real and the good are infinite, infinitely complex and so too are the possible

ways of knowing them, although we can never know them completely. Nevertheless, the central premise of Sack's theory suggests that we move closer to the real and the good by creating places that expand our awareness of the real and the variety and complexity of that reality. These are the two intrinsic criteria, Sack argues, that allow us to gauge whether we are making moral geographic progress. In other words, moral progress is achieved by treating knowledge as a gift and expanding the ways in which knowledge can be accessed, understood, shared and created. Sack argues that geography helps us in this task because places are not only a necessary tool for virtually every human endeavor, but they too can possess this gift-like quality. According to this theory, the moral domain then is not relative, rather it points our place making efforts toward the specific task of creating places that expand our awareness of reality and the variety and complexity of reality. How is it then, that the empirical is rooted in, and animated by, the moral?

Just as the empirical domain weaves together threads of meaning, nature and social relations, the moral domain weaves together corresponding threads of truth, the natural and justice. When we express or contest the appearance of a project or place, we are making claims to what we believe to be true. When we facilitate or disrupt the flow of natural and social elements, we do so in accordance to what we perceive to be natural. And when we support or admonish the conditions of social relations in our society or others', we are calling attention to what we believe to be just. In this way, threads of the empirical domain and the moral domain are woven into place simultaneously, with the moral guiding, animating and ultimately justifying the empirical. Consider, once again, the example of the community shelter. As we have discussed, the community shelter is a place which focuses on the realm of social relations and is therefore animated by principles of justice. For example, guests are not admitted into the shelter after ten o'clock at night. Should a woman and her children, however, arrive at the shelter well past midnight fleeing a home

of domestic violence, the realm of justice would prevail and they would be admitted. The same, of course, would not be true if a drunkard were to show up at the same hour looking for a place to recuperate. The principles of justice at the shelter are based on human need, and to some degree on merit, but they might also correspond to a more complex view of rights. From a Rawlsian perspective, the community shelter might be working towards an intimation of justice by helping guests gain access to more social, economic and political opportunities.

At the same time, the realm of meaning is being woven into the community shelter by case-managers who wish to impart lessons and skills to their clients so that they might regain their independence and self-confidence. These messages are likely more than random bits of advice. They likely correspond to elements of truth that the case-manager wishes to share with his or her clients. The job of a case-manager is to shed light on the reality of the world that their clients must interact with, to help them grapple with the challenges they will likely face and to provide them with the lessons and skills to face those challenges head-on. This job then requires that the case-manager provide as close a depiction of the truth as possible. Finally, elements of justice and truth, while being featured most prominently in the shelter, are ultimately subject to the natural realm. If during a torrential storm the shelter were to be inundated with several inches of water, leading to the growth of noxious mold in some areas of the building, projects of justice and truth would need to be set aside while elements of the natural were dealt with. The point of providing these examples is to demonstrate how elements from the moral domain and the empirical domain constitute each and every place we create, thus making them inherent to each and every project we undertake. The point is also to demonstrate that most places and projects, such as a community shelter, university classroom, museum, war memorial, wildlife preserve, coffee farm, or jail, focus primarily on one realm of the empirical and moral domain with the other realms playing supporting roles.

The larger issue, as I have already introduced, concerns the debate about whether our claims to what is true, just and natural are dependent upon the context of a place and project, or if they in fact are linked to intrinsic qualities of the real and the good. From the standpoint of instrumental geographic judgments, place cannot be any better than the goal of the project for which it was designed. To hold the instrumental position is to then argue that all moral views concerning what is true, just and natural “arise from a context and apply to that context” (Sack, 2001b, p. 121). To this end, the loom works quite well. So long as the moral domain supports the goal of the project, it can help to guide, animate and justify the use of social relations, meaning and nature in the empirical domain to achieve that goal. What might this mean for the moral domain used in classrooms of the antebellum south? Here, elements of truth, justice and the natural were construed to support the project of slavery. The social relations which supported the separation, auction, and enslavement of African families could not have persisted without the support of places, like classrooms, whose moral weave was used to not only make this system appear just and truthful, but also natural. Therefore, without intrinsic judgments the loom still operates. We use it to weave necessary elements from the empirical and the moral domain into the places and the projects we create so that we can use them to transform reality into our image of what we think it ought to be. If, however, we allow the *ought* in our geographic condition to be determined by instrumental judgments, we run the grave risk of not only proceeding without a sense of moral progress, but also of creating places that may be used by some to wield power over others.

Intrinsic geographic judgments help us to reorient the virtues of truth, justice and the natural towards the real and the good and away from instrumentalism and relativism. As mentioned in the previous section, intrinsic geographic judgments are based on the criteria of seeing through

to the real and valuing a more varied and complex reality. From a geographic perspective, seeing the world more clearly implies seeing how places and their parts operate and are interrelated, and this “requires a complex social apparatus that promotes free and open exchange of knowledge, and provides everyone with opportunities to expand his or her horizons” (Sack, 2001b, p. 122). Valuing a more varied and complex reality implies that we ought to value places which celebrate both cultural and natural diversity. How then do these criteria apply to the moral realms of truth, justice and the natural? The underlying point is that seeing through to the real and variety and complexity only work as moral criteria if they are shared collectively. If only one group is becoming more aware, their reality is certainly becoming less diverse because it is being dominated by a single perspective. And if only one group is experiencing a more varied and complex reality, this would be a sham because they would only be experiencing the diversity that they themselves had created, thus limiting their awareness of the rest of reality. With this point in mind, let us turn to the realm of truth.

Truth

Intrinsic geographic judgments adhere to the correspondence theory of truth. This requires that what we claim to be true, also be the closest approximation to reality as possible. There are, of course, other theories of truth, such as coherence theories and consensus theories, which apply to the realms of mathematics and religion respectively (Sack, 2001b). However, because intrinsic geographic judgments assume that reality does exist and that the good is a part of it, it argues that what we claim to be true ought to correspond with our closest approximation to reality. The only way of ensuring this, is to promote and celebrate a variety of views. Therefore, “intrinsic geographic judgments require that there be numerous places and points of views from which to see reality, and that all of these views be made available as public contributions or gifts - that they

be open and accessible” (Sack, 2001b; p. 123). Unfortunately, few places come to mind which treat knowledge as a public contribution. It is far easier to think of examples, such as intellectual property regimes, whose goal is based on sequestering and monetizing knowledge for profit. These then are examples of where some groups might be making instrumental progress, but where we as a society may also be regressing morally.

Justice

In regards to the realm of justice, intrinsic geographic judgments are generally in agreement with common principles of liberty and equality, which can be found in most liberal democracies. Unlike most liberal democracies, however, which focus primarily on defending the rights of individuals to pursue their own self-interests, intrinsic geographic judgments, emphasize the functional role of rights in moving us collectively toward the good. How, though, does this work? Much like Hannah Arendt’s emphasis on first establishing “a rights to rights”, the theory requires that rights not only enable us to receive the gifts of awareness, variety and complexity, but that they also enable us to create places through which awareness, variety and complexity can be gifted unto others. The theory’s essential view of justice is that people be given the opportunity to not only receive rights but also to create places through which rights can be asserted and brought into existence. As discussed in Chapter 2, Patel argues in favor of such a view on justice because human rights cannot be pulled from thin air. At some point, the right to have a right must be asserted because there are many places in the world whose moral and empirical threads have been construed in such a way so as to erode rights. Intrinsic geographic judgments work well with the conception of justice used by food sovereignty actors, because an essential aspect of their projects is to create places through which the right over land, seed, water, food systems and food policies can be meaningfully and substantively asserted.

Nature

The intrinsic view of truth and justice is rather straightforward. These are virtues that we would like to preserve and exemplify in our lives, in our communities, in the places we create and in the projects that we pursue. The intrinsic view of the natural, however, is less clear, and certainly more complex. As Sack explains, the “givenness” of nature provides an idealized image of pure altruism while at the same time pointing out our own inability as humans to give selflessly without consideration as to how our gifts will be used. Sack is quick to acknowledge that “nature has no purpose, plan or intent” (Sack, 2001, p. 124). We do not attribute conscious choice to the arrival of rain after a long period of drought, nor to an earthquake that takes thousands of lives unless, of course, we attribute these events to acts of God. Rather, what Sack wishes to emphasize is that the natural provides an invaluable example of what it would look like to give without intention, without strings attached. The origin story of corn helps to illustrate this point.

Modern day corn is derived from an ancient grass known as teosinte. Humans did nothing to bring this grass into existence, it was a given. But the Maya cultivated the seed of Teosinte for millennia, eventually producing tens of thousands of native varieties of corn. Teosinte began as a wild grass with unpredictable traits, and through human ingenuity this “gift” was transformed into thousands of unique and highly productive varieties of corn, which now represent the genetic foundation of the world’s corn supply. Unfortunately, the recent push to patent plant genomes and to privatize plant breeding has turned this gift into an exclusive enterprise based entirely on the sequestration of what is naturally a common good. And so, we see that when gifts are released into the world without intention, as does the natural (although we know that nature really has no intention), they may be used in ways that are good or bad. In this way, the intrinsic view of the natural serves as a point of reference for the altruistic qualities of our judgments. We ought to

create places through which truth and justice are given freely. We must do so conscientiously, however, so as to not destroy ourselves.

The Gift of Place

The core idea of Sack's moral geographic theory rests on two important points. The first being that "intrinsic judgements allow us to see place and its products as part of a system of altruism" (Sack, 2001, p.124). The second is that we can make our instrumental judgments more like intrinsic ones by assessing whether the places and projects we create help us to see more clearly and to make reality more varied and complex. This theory, in my mind, firmly establishes the reason as to why food sovereignty is in fact a moral imperative. In its most essential form, food sovereignty is about creating places and projects that work to decentralize, share, expand and diversify control over seed, agriculture, land, and food production. They do this not only by exposing and challenging systems of power i.e., intellectual property regimes and neo-liberal constructions of common sense agriculture. They also destabilize power by re-assuming control over the commons, and by treating the commons as a gift to be shared and propagated through sharing. The commons include not only native and heirloom seeds but also complex and deeply symbolic sets of knowledge about agriculture, plant breeding, and creative ways of preparing food. In this way, food sovereignty is about making the instrumental goals of the global food system more like intrinsic ones by creating places through which seed and agricultural knowledge are treated as gifts to be shared rather than commodities to be hoarded.

Therefore, food sovereignty is less about demanding the right to food than it is about bringing a meaningful right to food into existence and propelling that right by creating places whose structure and dynamics are guided by intrinsic, rather than instrumental goals. I will emphasize, however, that simply because a project claims to be working towards food sovereignty,

does not mean that instrumental goals do not play a key role. After all, reducing malnutrition and producing high yields are both instrumental goals that any food sovereignty project would be foolish not to prioritize. If in pursuing these goals, however, the project also becomes more opaque by excluding smallholder farms, and less diverse by favoring a single crop, we can see how even food sovereignty projects can fall victim to an instrumental way of thinking.

This brings us to the subject of the following chapter in which I will discuss the case of food sovereignty in the municipality of San Lucas Toliman, Guatemala. The purpose of this inquiry is first, to ground Sack's moral geographic theory in a concrete case of food sovereignty, and to bring to light the dilemma in navigating between instrumental and intrinsic progress. The additional purpose of the chapter is to show how food sovereignty, in its effort to dismantle systems of power, can inadvertently create its own, depending on how the structure and dynamics of place are put to use. I present this case not because I believe it speaks for all instances of food sovereignty, but because I believe it sheds light on the central role of place in making food sovereignty possible, no matter how different it might look from one community or country to the next. Finally, with place as the central point of analysis, I believe this case helps to tease out the shared and distinguishing views on place between fields of geography and planning. This last point will likely become more important as food sovereignty, a movement defined by place (Desmarais, 2014) continues to gain attention in fields, like geography and planning, whose focus on power, values, advocacy and action oriented research, is itself centered around a growing understanding that place represents the irreducible nexus of social practice (Friedmann, 2010).

Chapter 6: Making Space for Food Sovereignty

Introduction

Something happened that changed the way I look at the relationship between power and rationality in planning and food sovereignty. Prior to beginning my research with the Instituto Mesoamericano de Permacultura (IMAP), my view on power stemmed from Flyvbjerg's reinterpretation of the Baconian dictum that "knowledge is power". In his seminal case study on the Aalborg Project in Northern Denmark, Flyvbjerg argues the inverse relation to be true, that "power is knowledge", that power defines what is real and what gets to count as knowledge (Flyvbjerg, 2002, p. 361).

In his study, Flyvbjerg revealed that the rationality surrounding the Aalborg Project, a massive plan to preserve the city's historic downtown via reduced automobile congestion, had been circumscribed by pro-automobile interests within the city's Chamber of Industry and Commerce, a coalition of private business owners. Together, with the City Council's Technical Committee and the Police Department, this triangulation of economic, political and executive power constitutes the City Center Group, responsible for planning and policy in downtown Aalborg. In secret, closed-door meetings, the Chamber of Industry and Commerce reviewed proposals for the Aalborg project, and rejected plans that would reduce automobile access to the historic downtown. These meetings occurred prior to the plans' review by the technical committee and the public. Therefore, this truncated both the public's knowledge of what was really going on, and their ability to participate in the democratic process. From this lesson, Flyvbjerg arrives at a similar critique of communicative planning shared by other planning theorists: that communicative planning i.e., planning which primarily promotes the establishment and engagement of institutions

that facilitate open public interaction is naïve in its faith that rationality and common sense will save the day (Fainstein, 2012). Flyvbjerg continues this critique, arguing that what is accepted as “reason” or “common sense” is simply a promulgation of a dominant rationality of the powerful. On this point, Flyvbjerg reminds us that he, as a planning theorist, is not alone. He pulls from the work of the late John Friedman, who wrote that perhaps the biggest problem in theorizing and understanding planning today is our ambivalence toward the “inevitable question of power” (Friedmann, 1998, p. 250). I too was convinced of the “inevitability” of power in determining the rationality behind public discourse, especially in how we define and address the issue of food insecurity, that is, until I became involved with a planning dilemma in the Western Highlands of Guatemala, and faced what you might call the inevitable question of place.

During my master’s degree program, I had the opportunity to spend two summers conducting fieldwork with IMAP in the municipality of San Lucas Tolimán, Guatemala. As their name implies, IMAP is an indigenous permaculture institute, founded in 2000 by a group of Kaqchikel *campesinos*, or farmers. IMAP emerged from a longstanding coffee cooperative called IJATZ, which is Kaqchikel for *semilla*, or seed. The founders of IMAP recognized that the cultivation of a single crop cannot make a community sustainable, even with the use organic inputs, and especially not when it is destined for foreign markets. Therefore, they set out to create a local institution that would help cultivate an alternative system to coffee based on genetic diversity, native seed, food production and intellectual creativity. Today, the director of IMAP, Rony Lec Ajcot, refers to IMAP as an institution of *aprendizaje*, an institution dedicated to promoting and strengthening local agrarian knowledge, especially concerning *semillas nativas y creiollas*, or native and heirloom seeds. For IMAP, genetic crop diversity is synonymous with cultural vitality, security and food sovereignty. Unfortunately, the context of agriculture in San Lucas Tolimán

remains overwhelmingly monocentric. Farmers estimate that 90% of all cultivated fields are dedicated to the production of coffee for export. Perhaps even more disconcerting is the inequitable distribution of land.

Similar to the rest of the country, a small group of non-indigenous families own roughly 80% of arable land in San Lucas Tolimán, while the remaining 20% is in the hands local Kaqchikel families. Indigenous lands are the most marginal in the municipality, meaning they are the most difficult to cultivate because of their remoteness, slope and limited water access. This, of course, was not always the case. Rather, indigenous Mayan communities relocated to remote regions of the western highlands over centuries of colonization, most recently expelled by the diffusion of non-traditional export crops, currency devaluation, rising costs of fertilizer and pesticide, and the consolidation of land ownership (Isakson, 2014). Despite these disadvantages, indigenous landowners lack alternatives to coffee production because the export market itself is monocentric. In fact, while speaking with farmers during my exploratory research period in 2015, I learned that those who plant coffee generally do so because they are landowners. Therefore, they have the time and security to invest in a crop which takes around three years to mature. In contrast, those who plant *milpa*, corn occasionally interspersed with beans, generally do so because they are land renters. No matter what they plant, they are at risk of losing their land and crops through the sale of their property, a common occurrence in a monocentric market, which favors consolidated land holdings. Therefore, corn and beans, which have a growing period of around five months, are a safer bet for land renters.

Several more farmers recounted this observation, and through their stories I began to see a trend that I found to be extremely disconcerting. Land ownership among smallholder farmers appeared less likely to improve the prospects for food security in San Lucas Tolimán than it did to

bolster rural and indigenous investment in coffee, an export commodity with an increasingly uncertain future, and a market in which indigenous farmers are systematically disadvantaged. During these two months of exploratory fieldwork, I learned a great deal about uncertainty in the coffee market, such as farmers' inability to negotiate fair prices with *los coyotes*, the local intermediaries for foreign buyers, like Starbucks. I came to learn, however, that the greatest uncertainty is in the plant itself. Changing climatic conditions across Central America have brought not only warmer temperatures and higher rainfall to the western highlands, but also a dramatic increase in the wind-born fungus known as *la roya*, or coffee leaf rust. In one interview, a coffee farmer with IJATZ recounted that during the height of the outbreak in 2013, he and many other smallholder farmers went entirely out of production. Many of those who did not own land, but who worked as laborers on one of the surrounding coffee plantations, known as *fincas*, lost their job during this period. Coffee growers and laborers in San Lucas Tolimán suffered a particularly devastating loss, as most grew a variety of coffee known as *Bourbon*, which is less resistant to coffee rust than the hybrid-variety farmers grow now, known as *Catimor*. Unfortunately, like many hybrid crops, Catimor requires ever-greater applications of synthetic fertilizer throughout its exceptionally short lifespan; 10 – 15 years for Catimor as compared to 70 – 80 years for Bourbon.

In a separate interview with three Tz'utujil farmers, a main topic of concern was the increasing difficulty to ween coffee, and the soil itself, off synthetic fertilizers. The cause for concern stems not only from the rising cost of fertilizer, which has been attributed to high rates of internal male migration to coastal plantations (Carey, 2009), there is also a close interaction between the use of synthetic fertilizers and illness in children. To be sure, foreign aid programs are targeting these issues directly, although with little success. Recalling a recent aid program

aimed at convincing small coffee growers to adopt organic fertilizer and hybrid seeds, one farmer mustered a bit of humor and described the experience this way: *Most of the leaves turned yellow, and did not take to the organic fertilizer. Plants, like children, have a way of telling you what they like, and what they do not like. These plants clearly wanted chemicals not vegetables.* From these experiences, farmers have learned that the processes of returning a conventional coffee field to its naturally productive state is neither a short nor simple task. With the amount of synthetic fertilizer required by hybrids, like Catimor, IMAP's technicians report that it takes roughly three years of carefully measured applications of organic material, such as compost or manure, to ween the soil entirely off synthetic fertilizer. A common, but costly, mistake happens when farmers stop applying synthetic fertilizer all at once, as these farmers experienced firsthand.

I began to wonder how it was that in a region which receives so much foreign aid, why the most food insecure populations had little choice but to compete in a system of production that worked so clearly in their disfavor. It seemed like the rationale of the global food security strategy was itself, in some way, misguided. To date, FTF, in partnership with the Coffee Farmer Resilience Fund, has raised \$8.3 million, out of a proposed \$23 million, to help more than 40,000 coffee farmers in Central America rehabilitate or replace rust-affected coffee trees (Progress Report, 2016). In this same report, FTF characterizes the coffee leaf rust crisis as a shock to food security in Central America. But on this point, I cannot look past the irony. From my experiences, walking with farmers through their coffee fields and listening to their stories, I agree that on the surface the coffee leaf rust crisis has made their communities more food insecure. This is only true, however, in the sense that they now have more trouble maintaining a vocation that itself has made their communities unstable and their children sick.

During this period, it became clear to me that the tactic of directing foreign aid to food insecure communities of coffee growers was less about making these communities more food secure for their own sake, than it was about securing a labor pool for the coffee market. In other words, I began to observe how the language of food security might be invoked by one group, whether a national government or a multinational corporation, for the instrumental purpose of securing power over the means of food and agricultural production. Of course, this tactic is hardly a new one. Language has been used to wield ideological power over agricultural development for centuries, from labelling farmers as “laggards” or “backward” if they could not afford, or chose not to adopt, Green Revolution technologies (Yapa, 1993), to calling countries, like El Salvador, “advanced” if they were early adopters of hybrid coffee varieties, like Catimor (Fulton, 1984). There are, unfortunately, many examples of how those with power use language to shape public discourse in such a way that agricultural development can only be rational, and therefore, “correct”, if it makes use of privately controlled innovations and technologies, like certified and hybrid seed.

One obvious consequence of this “might makes right” rationality in agriculture is that we now produce and consume far fewer plants than we used to. Whereas humans have domesticated over 3,000 varieties of plants for food, we now produce around 20 (Vietmeyer, 1986). This, of course, elevates the likelihood of more severe instances of food insecurity in places like San Lucas Tolimán, where 67.4% of children under the age of 5 suffer from moderate or severe chronic malnutrition (Angeles, 2014). One such plant, systematically uprooted from Mayan culture and now serving at the forefront of IMAP’s push for food sovereignty, is an ancient grain known as amaranth, or *amaranto*. Like other plants that were first domesticated near the tropics, amaranth has been neglected for centuries as a “poor persons’ crop”. Just as Americans refused to eat peanuts

because they were considered “slave food”, and the English refused to eat potatoes because they were considered “Irish food” (Vietmeyer, 1986), I observed, through conversations and interviews, that indigenous farmers generally scoff at the idea of eating, let alone cultivating, amaranth. This is likely because the colloquial word for amaranth, *bledo*, literally means worthless. A common phrase, *me importa un bledo*, roughly translates to “I don’t give a damn”, and more accurately implies, “I don’t give an amaranth seed”.

The origin of amaranth’s unwarranted discrimination began over 500 years ago, with the outright ban placed on its cultivation by Spanish colonialists. In Mayan, Aztec, and Inca societies, amaranth was not just a staple of the Mesoamerican diet, due to its high concentration of total protein and the “nutritionally essential amino acid, lysine, it was also a religious symbol (Vietmeyer, 1986). The small grains, more accurately called pseudo-seeds, stuck together with molasses and honey to create shapes of religious idols in what the Spanish viewed as pagan ceremonies. In Aztec societies, some ceremonies involving amaranth also involved human sacrifice (Vietmeyer, 1986), although it is unclear whether this was also true for Inca and Mayan societies. What is important is that amaranth, like many other native plants and seeds, served for millennia as the bridge between culture and agriculture. Through the subversive use of power and language, however, many native seeds have faded into obscurity. And in their place has emerged the conventional rationality toward seed that we see today, where a seed’s worth is measured strictly in terms of its ability to achieve maximum short term yields, and where innovations in plant breeding flow in a decidedly north – south direction.

The planning dilemma that I became involved with challenged what I saw as this unfortunate, yet inherent, asymmetry between power and rationality in planning, with power determining what rational planning ought to look like. It also begged the question, “What gets to

count as planning?” outside the field’s professional context? The dilemma arose from IMAP’s latest community based project called *Nutrición Nativa*, or Native Nutrition, which is now on its second of three years of funding from the Inter-American Development Bank. The mission of *Nutrición Nativa* is to promote and propel the production of amaranth in local communities to combat malnutrition and to form a strategy to achieve food sovereignty. The dilemma lies in the fact that amaranth, as I have indicated, has a particularly negative connotation in rural Mayan communities. In addition, most farmers find themselves entirely occupied by the production of coffee. In one of my first meetings with Rony Lec Ajcot, he phrased the dilemma this way, *When 90% of the land around you is dedicated to coffee, how do you produce food?* This was, of course, a rhetorical question, but overtime I began to see that IMAP was developing an answer.

To promote and propel the production of amaranth, IMAP began by embracing what is inherent to our geographic condition, and a necessary part of food sovereignty: to prefigure the reality they wished to see and to bring that reality into existence using place as a tool. For IMAP, this desired reality is one where native and heirloom seeds thrive on a national level through a network of regional seed banks supported by local communities of plant breeders, thus creating a basic framework for asserting and protecting the country’s food sovereignty. To bring this reality into existence, *Nutrición Nativa* introduces not only amaranth, but also cultural and technical knowledge about native and heirloom seeds into local communities where alternatives to export-oriented agriculture rarely penetrate. In this way, IMAP challenges the power structure of export-oriented agriculture by transgressing the rules of place. These are implicit rules dictating what is, and what is not, allowed in places of agricultural production. In doing so, they push back against the treatment of seed and scientific knowledge as commodities by providing an alternative grass roots approach, whereby seed and knowledge are treated as gifts. They take these actions not from

the vantage point of planning theory, but from the grounded materiality of a serious planning issue. Namely, how to democratize the control of seed and nutrition within indigenous communities.

To be sure, IMAP's strategy may be seen as a tactic to destabilize one form of power, only to create room for another. Perhaps, even their own. I have learned, however, that this critique overlooks what is arguably much more important. That no matter who is in charge of place, whether it be IMAP, local community leaders, or the intermediaries of a multinational corporation, the mechanics of place do not change, only how they are used and whether their use is guided primarily by instrumental or intrinsic judgments, by self-interest or by altruism. If we look beyond the asymmetrical link between power and rationality, a level of analysis which I believe grants too much power to power, we see that place emerges as the common denominator in all aspects of social practice. From this perspective, we see that while some groups may have more influence over how the structure and dynamics of place are put to use, their power does not necessarily determine whether the rest of us rationalize their use of place as being good.

In other words, the link between power and rationality is real only to the extent that we allow it to be. There is nothing preventing us, apart from our own lack of awareness, from stepping outside the places we interact with and asking, "Do these places grant ourselves and others control over their structure and dynamics?" If not, it is within our power as moral agents to not only speak out against such use of place, but to take hold of the loom and to alter how place is used and who it is used by. From what I observed during this period of exploratory research, "taking hold of the loom" appeared to be IMAP's implicit agenda, which is to give local communities control over native seed and agricultural knowledge, thereby expanding their control over the structure and dynamics of place. I made these observations as IMAP's Nutrition Nativa project was just getting underway. In 2015, IMAP was still in the process of visiting local communities to find farmers

interested in growing amaranth. I had the opportunity to participate in four of these visits, where I learned of farmers' hesitancy to invest in a crop that had for centuries been regarded as worthless.

As the summer ended, it was clear that IMAP was embarking on what would surely be a challenging project. It was also clear, however, that *Nutrición Nativa* had the potential to create a feasible and truly local solution to malnutrition in San Lucas Tolimán, and perhaps, a groundwork for local food sovereignty. What convinced me of this was IMAP's pre-figurative process of practicing the reality that they wished to see by planting and harvesting amaranth in places where it "did not belong". They were developing, from my perspective, a strategy that might one day cultivate their communities' right to food sovereignty by giving them the material and non-material tools to bring that right into existence themselves. As Hannah Arendt observes, people deprived of human rights are deprived, not of freedom, but of the right to action and the ability to effect change in the world around them (Arendt, 1967). Raj Patel sees Arendt's emphasis on the 'right to action', or the 'right to a right', as the central motivation of food sovereignty. And from my experiences, I found that IMAP's *Nutrición Nativa* project channeled a similar and equally powerful idea – that a just and moral world is not something which is provided to us, rather it is something which we are responsible for creating ourselves, together.

With the opportunity to return to IMAP in 2016, I set about exploring this idea further. In a project which so clearly confronted the instrumental and intrinsic use of place, I wanted to see how, and in what ways, instrumental and intrinsic judgments steered the direction of *Nutrición Nativa*, and whether this was a direction toward moral progress. Using Sack's theory presented in Chapter 5, I accept that because reality exists and because the good is a part of the real, we can have a positive picture of moral progress. This picture is characterized by the two intrinsic criteria of the good i.e., seeing through to the real and valuing a more varied and complex reality (Sack,

2001b). These two criteria, however, only move us toward the good if the moral virtues of place i.e., truth, justice and the natural, “provide others with an expanded and more varied world” (Sack, 2001b, p. 123). Moral progress then, is not achieved when one person has made themselves more aware and their reality more varied and complex, but when all people are given the right to see reality more clearly and to contribute to that reality so that it becomes more varied and complex. In this way, we see that Benhabib’s ‘moral universalism’, which Patel argues is the precursor to cosmopolitan federalism and food sovereignty, can in fact be articulated in a meaningful way, because we have a ‘moral picture’ of what progress implies and what it does not.

The connection between moral progress and rights has yet to be made in food sovereignty literature. Likely because the push for moral universalism is viewed by many social theorists as a step towards moral absolutism. They would rather morality remain situated, context-dependent and relative. This position represents the path of least resistance, but it is also a contradictory and untenable position. For in order to claim something as unjust, one must have an intimation of what is just and therefore, what is good. To then say that what is good is a matter of situational ethics, puts our globalized world in a bit of a quandary to say the least. Therefore, I offer the following case study to illustrate how intrinsic geographic judgments might be used to evaluate the moral progress of a food sovereignty project. My rationale for employing the case study method using qualitative research will be explained in the following section, but my reason for involving myself in a single case is quite simple. Thoroughly executed case studies provide disciplines with exemplars to build their knowledge base. Although food sovereignty has yet to be called a discipline, I believe it warrants more exemplars if we are to take the human right to food more seriously in the years and generations to come.

Logic of Research Methodology

This is a qualitative research study examined through the lens of human geography. Two key questions for qualitative researchers concern the shape of social structures and the individual experiences of places and events (Winchester & Rofe, 2010). These concerns are mutually constitutive, because social structures mold individual experiences, while individuals can contest and change the shape of social structures. Qualitative research also involves gathering and interpreting social information (Dowling, 2010) which itself implies personal interaction. Therefore, while qualitative researchers ask questions about social structures and individual experiences, they too become part of the context they investigate. Qualitative researchers who make an effort to become aware and appreciative of the social nature of their work employ critical reflexivity (England, 1994). A process, whereby the researcher consciously examines his or her own role in the situation being studied and how and in what ways their role, or mere presence, effects the social structure of the situation and what information is gathered. Using the methods discussed below and the theory discussed in Chapter 5, I examine the shape of the Nutrición Nativa project, itself a social structure. The shape of Nutrición Nativa is formed by the instrumental and intrinsic judgements made by IMAP as well their participating communities. These judgments, in turn, determine how the structure and dynamics of place are put to use to achieve either instrumental or intrinsic progress. I examine how place is experienced by those participating in the project, while keeping in mind my own possible influence on the project's structure. In pursuing this direction of inquiry, I seek to illuminate that which makes food sovereignty, as others have suggested, an intrinsic or 'moral enterprise', as well as that which makes food sovereignty susceptible to instrumentalism.

There are several reasons why a researcher might decide to focus on a single case, rather than multiple cases. Due to the circumstances of my own research, the reasons were both practical and consistent with the nature of the case itself. For practical reasons, it would not have been appropriate, nor possible, to embed myself within the project of a local indigenous organization and their participating communities, without first developing rapport and trust. It is for this reason that I dedicated my exploratory research period in 2015 to developing both a personal and professional relationship with IMAP's members and their surrounding communities. The case of Nutrición Nativa is also consistent with the rationale for single case designs. One rationale for a single case is if it is a critical case. Meaning, it has "strategic importance to a general problem or movement" (Flyvbjerg, 2006, p. 229), and that it tests a well-formulated theory" (Yin, 2003). Nutrición Nativa may be considered a critical case for several reasons, but two are most important. To date, Nutrición Nativa represents the largest locally managed operation of amaranth cultivation in the department of Sololá. Therefore, it has strategic importance in the department's fight against chronic malnutrition and food insecurity. Additionally, because IMAP must become an established business to produce and sell amaranth based products legally, their organization must grapple with competing interests of instrumental progress, as a business, and intrinsic progress, as a social organization dedicated to the pursuit of food sovereignty. This last point makes the case of Nutrición Nativa especially relevant to testing the applicability of Sack's moral geographic theory and the overall reasonability of moral progress in food sovereignty.

Research Design

The study is designed in accordance with the five components of case study research, as proposed by Robert Yin. These components include: the study's research questions, its propositions or purpose, its units of analysis, the logic linking the information collected to the propositions or purpose, and the criteria for interpreting the findings (Yin, 2003, p. 21).

Research Questions

Although much has been written about what food sovereignty stands for, less has been said about its idea of progress. If food sovereignty means the right of individuals and communities to determine their own food and agricultural systems and policies, does that also imply that they forge their own directionality of progress? In other words, how do the planners and recipients of food sovereignty know they are moving in the right direction? How do they use place as a tool to achieve progress? And what sort of progress is actually being achieved? These questions motivate my research.

In my thesis, I have adapted my questions to the structure of Flyvbjerg's classic value-rational questions for phronetic planning researchers (Flyvbjerg, 2001, p. 162):

1. *Where are we going?*
2. *Who gains, and who loses, by which mechanisms of power?*
3. *Is this desirable?*
4. *What should be done?*

The purpose of asking questions one, three, and four, is to help planners and those planned to think and act in more value-rational terms. They position social inquiry so that society's values are placed front and center, rather than being masked, as they so often are, by scientific and

technical rationality. Question two looks at the relationship between the power of place and progress. Here, however, I make an important adjustment. Sack writes that it is only by putting the structure and dynamics of place to use that we create and dismantle power, whether for good or for evil (Sack, 2002). Therefore, my thesis is concerned with how the structure and dynamics of place are put to use, as this determines who gains and who loses. With the case of Nutrición Nativa in mind, I have re-written Flyvbjerg's value-rational questions this way:

1. *Where are we going with planning for food sovereignty in San Lucas Tolimán?*
2. *How are the mechanics of place used to achieve progress?*
3. *Is this desirable?*
4. *What should be done?*

According to Yin (2003, pp. 74) case studies can be designed around five levels of questions. Questions asked verbally to interviewees, and questions asked to oneself about the case in general are known as level one and level two questions, respectively.

- *Level 1: Questions asked of specific interviewees*
- *Level 2: Questions asked of the individual case*

Level one and level two questions are the most important for a researcher to articulate and distinguish between, as they represent his or her verbal line of inquiry (Level One) and mental line of inquiry (Level Two) (Yin, 2003). For example, to determine whether a particular university fosters a racist atmosphere, a student researcher might ask individual students about the extent to which they interact with students of different races, a level one question. Rather than asking, "Do you think our university fosters racism?" level one questions allow the researcher to extrapolate to level two questions concerning the case itself. Level two questions, however, are also explored by

the researcher using other forms of inquiry, such as participant observation and critical reflexivity. Below, I briefly explain the logic of the case study's questions. Questions one and two are answered using both verbal and mental inquiry, while questions three and four rely primarily on mental inquiry.

1. Where are we going with planning for food sovereignty in the Nutrición Nativa project?

This is the broadest question of the case study because it is primarily a level two question. To ask, "Where are we going?" gives the study context and direction. Flyvbjerg prefers to frame the question in terms of *planning* and *democracy*. In the Alborg Study, Flyvbjerg's short answer to this question, after having unearthed the interplay between power and rationality, was that planning and democracy in Alborg was headed "astray" (Flyvbjerg, 2002, p. 357). His question, of course, was asked in the global "North-West" context of planning which bears little resemblance to the "south-west", or "south-east", where planners represent only a marginal group in element in myriad of spatial agents shaping the nature of cities and regions (Yiftachel, 2012). Mainstream communicative planning, Yiftachel writes, with its emphasis on public participation and open deliberation, distracts from the materiality of what is at stake "in a more uncompromising development environment characterized by creating facts on the ground" (Yiftachel, 2012, p. 542). Rather than exporting planning theory from north to south, Yiftachel emphasizes the need for "reverse flows of theoretical knowledge" (Yiftachel, 2012, p. 544). This is especially important as northern regions begin to take on agendas, such as solidarity around the commons, which have deeply rooted histories in the global south.

My interest in asking this first question is to attempt to understand what it is that makes this case, and food sovereignty, planning endeavors, and why they must be understood on terms that the professional field of planning is not yet accustomed to. Here I emphasize what the

commons might mean in sense of planning for food sovereignty. I ask the question “*Where are we going?*” in relation to how those within the case of Nutrición Nativa understand and use place and the commons to foster an intimation of food sovereignty and to pursue a particular direction of progress. Therefore, this question also has a verbal line of inquiry involving visits to the homes of seed growers who produce the commons through the daily cultivation of native and heirloom seed.

How are the mechanics of place used to achieve progress?

This next question looks at how progress is achieved through the use of place as a tool. In the field of geography, place is often imagined as a sort of performance stage, with all of the necessary conditions for creative social practice (Creswell, 2004). In this same vein, planners often view the destruction of place as a violent and undesired act, because it destroys the “established patterns of human relationships” (Friedman, 2010, p. 157). These perspectives help us to understand place as a reiterative social process (Creswell, 2004), and this is important, because place is not a permanent fixture of reality. Place is always undergoing social change. In emphasizing the social, however, these conventional views on place reduce nature, meaning and space to social constructions, which they are not. Sack writes that unless we only speak of space metaphorically, “we must take our cues from the physical sciences, which tells us that though it is conceptualized and modeled by human beings, physical space is still thought to refer to something out there that is not made up by us” (Sack, 2001a, p. 112).

Therefore, when we create, destroy and transform place – neither of these options being necessarily better or worse than the other – we are using the structure and dynamics, or mechanics, of place as a tool to draw upon the real and material qualities of meaning, nature and social relations. As discussed in Chapter 5, the material qualities of social relations are typically woven into place by rules of in/out, while the material qualities of nature and meaning are woven by

spatial flows and appearance, respectively. Depending upon whether the mechanics of place are used to enrich or impoverish reality, determines whether or not we are making moral progress. Therefore, in asking “*How are the mechanics of place used to achieve progress?*” I not only seek to understand the materiality of the planning issue i.e., how place is used to pursue the goals of Nutrición Nativa, but whether this use of place then translates to intrinsic progress.

2. *Is this desirable?*

The third value-rational question opens a given case to critique. For the Alborg case, Flyvbjerg’s answer to this question was a decisive, “No”. He revealed that the city’s Chamber of Industry and Commerce had used its power over the rationality of the City Council to influence “Alborg’s truth” (Flyvbjerg, 2002, p. 360), so that the Alborg Project would not reduce car access to the historic downtown. Flyvbjerg did not find it necessary to explain why exactly this was undesirable, as basic democratic ideals were being violated. If the case were more nuanced, however, and the role of power less obvious, Flyvbjerg would suggest that we refer to the situational ethics of the case itself (Flyvbjerg, 2001, p. 130). The problem with this approach, despite relegating morality to context, is that it limits our critique of projects and places to instrumental judgments. In other words, we are only examining the issue in light of how groups and individuals satisfy their own self-interested view of progress. Clearly, the way one group satisfies its self-interests might be considered undesirable given the self-interests of another group. But this does not tell us why a group’s criteria for progress is good or bad. In my opinion, this path of inquiry does not seem particularly enlightening. If we consider the situation from the perspective of Sack’s intrinsic geographic judgments, however, we can more effectively analyze whether and why the progress being made is in fact moral progress and therefore, desirable.

3. *What should be done?*

The simple answer to this question, no matter the case or context, is that we strive to make our instrumental judgments more like intrinsic ones. As Sack suggests, we ought to concern ourselves with creating places and taking on projects with “a more altruistic and gift-giving purpose” (Sack, 2001b, p. 119), rather than a purpose based only on the fulfillment of self-interest and accumulation. To this end, there is no limit to how far we may improve. For while most of us would like there to be a check on how much greed there is in the world, certainly none of us wishes to place a check on how kind, aware and just our society is capable of becoming. Of course, try as we might, we will never fully grasp reality, and we will never be completely good, but that is the point of progress. As Sack writes, progress is change in the direction of a goal that is compelling and demanding, but that is ultimately unattainable (Sack, 2002, p. 113). To become more aware with others and to cultivate an increasingly varied and complex world together, is such a goal worthy of being pursued in the name of progress. It is by treating truth, justice, and the natural as gifts, that we move in this direction. Referring back to the first question, this is *where* we should be going. “*What should be done?*” then becomes a question of what those within the case of Nutrición Nativa can do to change in the direction of intrinsic goals.

Purpose and Criteria

Case studies often contain a set of propositions which direct the researcher towards information that may be relevant to the questions being asked. According to Yin, however, case studies which are exploratory in nature “have a legitimate reason for not having any propositions” (Yin, 2003, p. 22). In this case, the researcher, like Christopher Columbus asking Queen Isabella to fund his exploration of the ‘New World’, is obligated to state the purpose of their exploration and the criteria by which the exploration will be evaluated. The purpose of my exploration into the

case of Nutrición Nativa was to get as close as possible to the reality of an organization employing the discourse of food sovereignty in their local communities. Megan Carney explains that it is problematic to use the terms food security and food sovereignty interchangeably, because each represents “different value-based assumptions about the human relationship to food” (Carney, 2012, p. 84). There is much to read about the values of food sovereignty, however, I wanted to see how they played out on the ground and whether, if I got close enough, I could see the structure and dynamics of place being used in accordance with instrumental and intrinsic judgements. My criteria for evaluating this exploration is no different than the criteria for intrinsic judgments that I employed when observing the case of Nutrición Nativa. I was most concerned with whether my inquiry into the project lead to a greater awareness of reality for those involved. For the members of IMAP, I was interested in helping to expand their awareness of the obstacles faced by their participants in growing amaranth. And for the participants, I was interested in helping them to gain a clearer image of the project’s goals. These goals are not only that local farmers grow and sell amaranth to IMAP, but that they also harvest and save seed to be replanted and consumed by their children. Examples of where I saw awareness being expanded, and also limited, are discussed in the case itself.

Units of Analysis

As a general rule, a case’s unit of analysis should be outlined by the initial research questions (Yin, 2003). Cases which look at the implementation of a project or program, however, may have units of analysis which are difficult to define because the project’s timeline and size are indeterminate. For example, in the case of Nutrición Nativa, IMAP began teaching local communities how to cultivate native and heirloom seeds over seventeen years ago, making it difficult to determine when exactly Nutrición Nativa ‘began’. Additionally, over the course of the

program's first two years of funding, the number of participating farmers has expanded and contracted while those involved have ranged from single individuals to entire communities. Therefore, making it difficult to measure the project's true size as well as the characteristics of those involved and how they are organized. Nevertheless, I found it most useful to look at IMAP and individual participants as two embedded units of analysis within the Nutrición Nativa project, which represents the topic of the case study. In other words, to understand what progress looks like, and how it is achieved in this case, I need to consider the judgements and use of place by both the organizers of Nutrición Nativa, as well as those who make the project possible through the investment of their time, energy and resources. By combining information collected at both of these embedded units, I am able to construct a more accurate image of where the project is going in terms of instrumental and intrinsic progress.

Linking Data to the Purpose

There are several analytic techniques a researcher might use to link their data to the propositions or purpose of the case. These include pattern-matching, explanation building, time-series analysis and logic models (Yin, 2003). I use the explanation building technique because I not only seek to explore the how progress is understood and achieved in the case of Nutrición Nativa, but also to explain why a certain direction of progress may be considered moral. As Yin writes, the explanatory building technique "is similar to the process of refining a set of ideas" (Yin, 2003, p. 112). In order for the case to be meaningful, however, the set of ideas ought to reflect a significant theoretical proposition. Although this case is guided more by purpose than it is propositions, the moral geographic theory being employed links the data being collected to Sack's two theoretical propositions:

- That for progress to be meaningful, it must be made in the direction of a goal that is both compelling, demanding and ultimately unattainable and;
- That a heightened awareness of the real and the good is the most worthy of these goals.

The information gathered in the case builds on these two theoretical positions. As the case unfolds, the reality of progress in the name of food sovereignty is brought to light and analyzed from this position.

Field Work Methodology

In conducting fieldwork, I sought multiple sources of evidence to help build an explanation for Nutrición Nativa's trajectory of progress. Yin refers to this course of data collection as triangulation, with its distinct advantage being the development of converging lines of inquiry (Yin, 2003, p. 98). Specifically, I relied on the three sources of evidence;

1. Participant observation
 - a. Attending and participating in project meetings
 - b. Providing technical assistance to IMAP extension agents to help project participants improve their amaranth cultivation methods
2. Semi-structured interviews with project participants
3. Focus groups with project participants

It is important to keep in mind, as Kearns writes, that all observation is a form of participant observation (Kearns, 2010). So it helps to think of observation as existing on a spectrum of participation, rather than as a participant/non-participant binary. I found myself at the *complete participation* end of the 'observation spectrum'. Not only was I living within one of the project's main communities and assisting with technical visits to participating farmers, my interview

questions and findings were a regular point of discussion during team meetings. Therefore, I not only found myself analyzing the project of Nutrición Nativa, but also trying my best help it succeed in the little ways that I could. In total, I participated in seven team meetings and twenty technical visits to field sites. During two of the project meetings, I presented my research findings using PowerPoint to illustrate what socio-economic obstacles were most commonly faced by project participants. This information was gathered during interviews and focus groups with project participants which I conducted as an independent researcher. During technical site visits to six of the seven participating communities, I used a notepad to document the cultivation process and the technical obstacles of growing amaranth, such as the small size of the seed, seedlings' susceptibility to ants, and amaranth's poor germination rate at low altitudes.

Semi-structured interviews and focus groups were central to the success of my research. As stated in the research purpose, my goal was to expand awareness on all fronts within the Nutrición Nativa project. This would not have been possible if I had not been able to speak with project participants without the supervision of IMAP's extension agents. It is important to recognize, however, that the opportunity to speak with participants alone would also not have been possible without the permission of IMAP's extension agents, as the project participants are simultaneously their community members, friends and, in some cases, family members. As Dunn suggests, I organized my semi-structured interview and focus group questions around ordered but flexible questions. I employed an interview guide that I developed with Nutrición Nativa's project coordinator, Nacario. The questions ranged from the participant's prior knowledge of amaranth, to the amount time and money they sacrificed to participate in the project. The same interview guide was used in both single person interviews and focus groups. In total, I held seven single person interviews and two focus groups, with the single person interviews lasting around thirty

minutes and the focus groups each lasting one hour. The first focus group consisted of three men from the IJATZ cooperative while the second focus group included six women and three men from the community of Pampojila.

Criteria for Interpreting Findings

As stated in the research questions above, my verbal and mental lines of inquiry are distinct from one another. In the verbal line of inquiry, I asked project participants directly about their experience during the implementation of the *Nutrición Nativa* project. Interpreting these findings is rather straight forward because, as I will demonstrate in the case, participation in the project was more economically challenging for some than it was for others. Participation was especially difficult for some women and families who had to take time off of work, or pay others to tend to their children while they spent time preparing land for the project. Meanwhile, some project participants found it rather easy to get involved as they owned land and could pay family members to take care of the manual labor to prepare their plot. Clearly, these findings reveal possible power inequities within the case.

My mental line of inquiry is necessarily more nuanced and revealing of the fact that place, instrumental and intrinsic judgments play a central role, and arguably a more important role than power, in steering the project's trajectory of progress. While in the process of participating and interviewing, I observe how those involved in *Nutrición Nativa* use place differently depending on their motivations and ultimately, their conception of progress. Here, the criteria for evaluating my findings is again the based on Sack's two qualities for intrinsic geographic judgments – whether the places being created allow us to see reality more clearly and to increase the variety and complexity of that reality. We must remember, as Patel writes, that a key challenge for food sovereignty today is not in demanding or receiving rights, but in figuring out the best way to create

rights that can be accessed across a range of geographies, by everyone, in substantive and meaningful ways. This challenge, he argues, demands that we take on activities which instantiate a sort of ‘moral universalism’. I believe a good first step in this direction is to first understand place-making as a right and a moral act in itself. Figuring out how, and under what conditions, place-making can be acted upon as a right and used as an instrument to move us in the direction of moral progress is the topic of this case.

Food Sovereignty: A Critical Case

Question 1: Where are we going?

In studying the Nutrición Nativa project as a planning issue, I had in mind Elinor Ostrom’s dual depiction of the commons. On the one hand, the commons represent systems, such as knowledge and language, that are difficult to control access to, “but one person’s use does not subtract a finite quantity from another’s use” (Ostrom, 2008, p. 10). While on the other hand, the commons also represent “common pool” resources which exist in large, but finite quantities where one person’s use may very well subtract from another’s use. I also had in mind the arguments made by Dolores Hayden and John Friedman, that as we move toward a more globalized world, our “place-bound identities” become more, not less important (Hayden, 1995, p.43), and as planners, our job is to figure-out how place can be “taken back” (Friedman, 2010, p. 149). As I became more familiar with the context of the Nutrición Nativa project, I began to see a strong connection between place and the commons.

One of the ways I went about understanding the context of the project was by visiting the homes of several women who regularly trade their saved-seed with IMAP’s seed bank, either in exchange for different varieties, or to “re-pay” for the seed they have borrowed. On one occasion,

I met with three seed producers who live in the community of Cerro de Oro, on the southern shore of Lake Atitlan. Like many other communities in the region, Cerro de Oro was originally built to accommodate the demands of a coffee plantation, by ensuring that “labor” lived on-site. The plantation of Cerro de Oro has since dissolved, but many of the men in the community continue to work as laborers at other large plantations, such as the plantation of Pampojila, for roughly \$5.50 - \$6.80, per day. Men in the community typically do not take part in the cultivation of native and heirloom seed, and so the producers I spoke with that day were three women who also happened to be close friends. Gregorio, a friend of mine, and an agricultural technician for IMAP, introduced me to Antonia, Vicenta and Andrea who have been trading seed amongst themselves, and with IMAP for several years. They also represent some of IMAP’s first producers of amaranth. For me, it was important to get a grasp on what seed saving looked like and what it meant to people for whom it was a part of their daily lives, as an essential goal of Nutrición Nativa is in reestablishing the connection between seed and culture.

Gregorio and I first meet Andrea at her home where she leads us on a tour of her medicinal garden. Like most families, the little land Andrea and her husband are able to rent is dedicated to supplying their family with corn for the entire year, leaving only a small garden plot available for fruits, vegetables, or in Andrea’s case, medicinal plants and peppers. Gregorio challenges me to see how many different plants I can count while looking at only one corner of the garden, but before I reach fifteen, Andrea tells us to come take a look at all of the seed she collected from her recent harvest. Standing in her doorway, I am astonished to see her holding what appears to be a large laundry basket overflowing with perhaps twenty bags of assorted seeds. I ask whether she plans to sell any of what she has harvested, and she laughs in reply. *Hardly anyone knows about these plants anymore*, she says. *I share them with friends and we teach each other how to use*

certain plants to make medicine for our families. Then, nudging Gregorio in his side she says teasingly, *But maybe IMAF would like to finally buy some!* Gregorio takes the joke in stride, and ushers us along to Vicenta's home where she and Antonia are waiting. Standing on her front porch, Vicenta and Antonia have also brought out their own laundry baskets filled with bags of assorted seeds. Having learned my lesson from Andrea, I ask a question that I hope they will appreciate. "Why do you harvest seed?", I ask. Vicenta smiles, a good sign, but the corners of her mouth begin to straighten as she answers my question. *We do not receive any money for doing this,* she says, *but these seeds have a long history. They have adapted to this place, and we have adapted to them. Because we keep only the best seeds, they are now very reliable. Most importantly, they have been passed down from mother to daughter for many generations and,* motioning to her daughter who is standing in the doorway behind her, *we hope that tradition continues. Not to mention,* Gregorio chimes in, *that while Andrea cultivates medicinal plants, Vicenta and Antonia cultivate several varieties of squash and beans. Thanks to each of them, sharing their seed and knowledge with each other and their neighbors, Cerro de Oro is less vulnerable to malnutrition than it might otherwise be.*

During this visit, it occurred to me that by looking at the commons, such as seed and knowledge, strictly as resources, we may overlook what seems to be more important to these women, and what may also be more important to food sovereignty: the process of commoning itself. Paul Routledge writes that the commons refer not only to resources, but also to the social process of being "in-common" with those who defend and reproduce the commons (Routledge, 2014, p. 73). In other words, the commons can only be as free, accessible and available as our capacity to work together to make them so. Knowledge, for example, cannot truly be considered part of the commons if one or several segments of society are systematically denied access to

education. Therefore, just as rights require our action to be made real and meaningful, so to do the commons require our conscious protection and reproduction so that they may be integrated into our social projects and goals.

The opportunity to speak with these women gave me a sense of what the commons means to them. More than seed, and the knowledge of how to cultivate seed, the commons also appears to represent what those within the Movimiento Campesino a Campesino (MACA) refer to as the moral obligation, or the *compromiso moral*. Eric Holt-Giménez describes the *compromiso moral* as the need to share with others what one has learned, not because of an enlightened self-interest, “but as a logical way of reducing overall social vulnerability” and as a way for those within a community “to leave an altruistic mark as a guide



Personal seed bank – Chucumuc

post for future generations” (Holt-Gimenez, 2006, p. 95). Andrea, Vicenta and Antonia, seemed to view seed saving in a similar light, as a way to reduce vulnerability through the preservation of genetic diversity, while also setting an example for their children of how reciprocity, solidarity and altruism around the commons creates a stronger and healthier community. I was both inspired and humbled by these three woman discussing their obligation to share with one another in the production and reproduction of not only seed, but also knowledge. At the same time, I began to wonder whether this same sentiment might be replicated within the Nutrición Nativa project. Is the process of commoning something that can be planned? I still was unsure where Nutrición Nativa was going with planning for food sovereignty, although I had a better idea of what the commons might mean to those who would participate in the project by growing amaranth. It was

not until I had spent several weeks touring the municipality of San Lucas Tolimán with IMAP's extension agents, and visiting with their new amaranth producers, that I began to grasp where *Nutrición Nativa* was going.

As we traveled to each of the participating communities, sometimes by pick-up, sometimes by bus, but most often on foot, I was reminded of the dominance that coffee has on the local economy and on the landscape. Even after having reached a particular community, we usually had to walk somewhere between thirty minutes to an hour to reach a family's field, because the land closest to the main highway is dedicated to coffee. Even still, no matter how far we walked, the amount coffee never seemed to decrease.

Rather, it simply occupied more precarious positions in the landscape. On especially steep hillsides, the land was carved into steps to accommodate for the slope. I had become so accustomed to seeing coffee everywhere I looked, that it caught me by surprise the first time I saw stalks of amaranth standing firmly



Terraced coffee production – Pampojila

between rows of coffee, high above the community of San Martin. This image brought to mind several ideas that had been swirling around in my head since I came back to Guatemala, but that I had yet to fully understand. It was plain to see, as Hayden might suggest, that with IMAP's support, amaranth producers were creating for themselves, and for their community, their own "place-bound identity" apart from coffee, which represents an identity that has been forced upon them by years of market-led agriculture. In this way, it could also be argued, as Friedman might suggest,

that IMAP was doing the job of planners by providing communities with the tools of the commons i.e., native seed and knowledge of how to cultivate and process seed, so that place could be “taken back”. While I believe both of these depictions bear some truth, I don’t believe they provide a complete picture of what is happening.

Perhaps this is due to the conventional view of place by renowned planners, such as John Friedman, who suggest that “place must be small, inhabited, and come to be cherished or valued by its resident population for all that it represents” (Friedman, 2010, p. 154). These qualities might be characteristic of a place, perhaps especially of urban and residential places, but it is wildly misleading to think of places only as distinct locations that we love and adore. We have places because we must have projects, and to have projects we must have places.

Whether or not we use places to take on projects that are good and inspiring, or evil and horrid, does not change the fact that they are places. Therefore, when we think about how it is that food sovereignty is “planned” we cannot look only at the superficial qualities of place. We must also consider how place is used to achieve the goals of the project, and whether those goals are morally justifiable or not.



Amaranth associated with coffee – San Martin

In the case of Nutrición Nativa, we see that the instrumental use of place for the cultivation of coffee and other non-traditional export oriented crops, is being challenged by intrinsic goals of protecting the commons. I also observed, however, that the sites of amaranth production exhibit important differences from one another in terms of how amaranth is being grown, and what it means to those who produce it. During my research, I came across two typical places produced by the Nutrición Nativa project, one where amaranth was being grown as a monoculture on relatively large plots of land, roughly 48x48m, and another where amaranth was being grown in smaller plots, roughly 16x16m, in association with other crops, or even next to a producer's home in small gardens and nurseries. The former resembles the homogenous linear pattern most often associated with cash crops, like coffee, whereas the latter resembles the heterogeneity found in permaculture, which seeks to maximize stability and yield through genetic diversity. These differences in places of cultivation seemed to influence the meaning, or value, that producers associated with amaranth. For example, the producers I spoke with who had dedicated a large plot of land to grow amaranth, expressed little interest in learning how to process and cook with amaranth seed at home.



Monoculture amaranth plot – San Lucas Tolimán

On the other hand, for those producers who had grown amaranth on smaller plots of land, closer to home, and in association with other food crops, learning how to process and cook with amaranth was their greatest priority. In the community of Pampojila, where women reported clearing small plots of maize in order to make room for amaranth, one interviewee explained that malnutrition is a serious issue. *Pregnant women here, and in neighboring towns, can't always feed*

themselves well when pregnant, and their malnutrition is passed on to their children. Once their children born, they don't weigh a whole lot. For these participants, amaranth means something more than a new commodity, it represents a solution to malnutrition which they themselves control. This added value that the smallest producers see in amaranth, however, is not only due to the reality of malnutrition in their communities. Rather, through the power of place, these producers, who are mainly women, have greatly expanded their awareness of amaranth, its role as a native seed in protecting biodiversity, its deep roots in their own culture, its methods of cultivation, and the various ways that it can be prepared for healthy meals. Indeed, those producers who reported greater interest in consuming their harvest rather than selling it also reported having attended one of IMAP's many amaranth workshops, which include lessons on harvesting and cooking amaranth using common household appliances.

With the emergence of these two distinct uses of place, I would answer the first question, "Where are we going?" by suggesting that *Nutrición Nativa* is working towards two directions of geographic progress, one which focuses on the instrumental goal of production and the other which pursues more intrinsic goals to enrich and diversify reality.

Question 2: How are the mechanics of place used to achieve progress?

Geographic progress, as discussed in Chapter 5, is made through our use of place to achieve certain goals. Instrumental geographical progress is made when place is used to produce an outcome relative to the goals of a project. For example, a central goal of *Nutrición Nativa*, especially so early on in its development, is to promote and propel the production of amaranth in local communities. Production is essential to the project's success because without material results the project will simply not get off the ground. Participating farmers will have little incentive to dedicate even a small portion of their land to amaranth, local communities will be left without a

feasible and sustainable solution to malnutrition, and IMAP will be unable to build their new business around amaranth based products. Therefore, production, to a certain extent, is key. In order to achieve this goal, places of production will need to weave together an appropriate mix of meaning, nature and social relations by including and excluding certain elements of reality, such as organic fertilizer and pests, respectively. If done well, places of production will likely generate high yields of amaranth, and Nutrición Nativa will be well on its way to success in terms of instrumental progress, which is relative to the goals of the project.

Intrinsic geographic progress may also be achieved while instrumental goals are pursued, since, intrinsic progress is not relative to the goals of a project. Rather, it is rooted in concepts of the real and the good. As stated in Chapter 5, intrinsic geographical progress is made when place leads us to value being more aware and seeing reality more clearly, while also valuing a more varied and complex reality. These are two qualities of the good that geography helps to illuminate through the concept of place, but they are certainly not beholden to geography alone. From a geographic perspective, seeing reality more clearly implies becoming more aware of how people, places and projects are interrelated and interdependent, while valuing a more varied and complex reality implies cultivating a more diverse and compelling world, one which never ceases to beckon our curiosity, and which lures us toward ever greater degrees of awareness and altruistic behavior. Places of agricultural production, can be made to possess such intrinsic qualities; they can lead us to see reality more clearly and to cultivate a more varied and complex world. They are not beholden to instrumental goals and progress, although the industrial model of agriculture makes them appear this way. Rather, places become purely instrumental only when the criteria with which they are evaluated is limited to the goals of a project i.e., production. If other more intrinsic criteria are also

used to guide a project forward, place may still help us to achieve short-term instrumental goals, but the arc of its trajectory will point towards the real and the good.

For example, a secondary goal of *Nutrición Nativa*, and core concern for IMAP as an indigenous permaculture institute, is to make local knowledge a central part of alternatives to industrialized agriculture. A common theme in permaculture is to find opportunities in obstacles, or to “creatively use and respond to change” (Veleto, 2008, p.52). Certainly, one of the greatest obstacles *Nutrición Nativa* must face, apart from amaranth’s poor reputation in the region, is the significant presence of industrialized agriculture, and the lack of available land in San Lucas Tolimán. Coffee is not native to Mesoamerica, nevertheless, it has come to define the landscape and livelihoods of indigenous communities. IMAP, in searching for alternatives to monoculture coffee production, recognizes that they will not help their communities by promoting a return to the agrarian lifestyles of their ancestors. In this new context, there are traditional practices that now are simply not sustainable, even though in the past they might have been. Land rotation and slash and burn farming, for example, used to be sustainable when there was more access to land and a family could work within a ten-year rotation cycle, allowing the land enough time to fully rejuvenate after each burn. Now, the majority of families must make do with one or two plots of land, and the option for rotation is no longer available for most farmers. If a family were to return to the slash and burn practice, this time without rotating fields, they would quickly impoverish the soil. Therefore, IMAP and the *Nutrition Nativa* project must find creative ways to adapt to this change in the landscape. They must find ways to be sustainable and to respect the natural world, while also supporting their communities who likely have very limited options when it comes to making space for a new crop.

In order to make local knowledge part of a sustainable alternative to monoculture coffee production, IMAP works to ensure that Nutrición Nativa not only focuses on the production side of the project, but also on the open and free exchange of knowledge between participating farmers, what may be called an intrinsic goal. IMAP extension agents conduct technical visits i.e., visits to farmers' fields to assess plant health and obstacles to cultivation, with groups of farmers whenever possible. During my research period in 2016, I participated in group-based technical visits in the communities of Chucumuc, Tierra Santa and San Martín. I also participated in technical visits in the communities of Cerro de Oro, Pampojila, and several peripheral neighborhoods outside the urban center of San Lucas Tolimán; these visits, however, were conducted with individual producers. In the community of Tierra Santa, I had the opportunity to participate in two technical visits with a group of five female farmers. During my first visit, Catarina, the leader of the group, and IMAP's main point of contact with the community, led us first to the nursery at her home where she and her husband, Vacilio, have experimented with raising amaranth seedlings using different mixes of soil, organic fertilizer and exposure to sunlight. Catarina explains to the group that she and her husband prefer planting in a nursery and transplanting healthy seedlings to their larger plot of land, because the nursery gives them greater control over the plant during its most fragile stages of growth, when it is weakest and most susceptible to pests, such as ants and grubs which are especially attracted to amaranth. From here, Catarina leads the group of women, IMAP's extension agent Nacario, myself and her two children on a tour of her and her husband's plot of land, as well as the plots of land being cultivated by the other women in the group. Each plot measures roughly 16x16m, or *una media cuerda*, an exceptionally small area when compared to the vast expanse of land surrounding us, which is almost entirely dedicated to coffee. At each plot we spend between 30-45 minutes assessing plant health, identifying known and un-known pests,

and strategizing about how best to manage the unique obstacles each plot faces i.e., too little sunlight, inclined slope, large presence of ants etc. We also use this time to discuss each farmer's approach to cultivating amaranth, given the spatial context of their land and their own unique obstacles. Some women, for example, who could not afford to clear any of their plots of maize, have experimented by planting amaranth between maize stalks. Others experimented in similar ways by planting amaranth between rows of coffee, tomato plants or even boulders where nothing else could grow. It appears that those who have experienced the greatest success in helping their plants to reach full maturity began, as Catarina and her husband did, with an at-home nursery.

Through this process of sharing each other's knowledge and experiences, participants within the *Nutrición Nativa* project give place additional and intrinsic value, apart from its instrumental value to produce as great a quantity of amaranth as possible. They are able to see more clearly and appreciate how the at-home nursery and the agricultural field, as two distinct places, are interrelated and interdependent. Their curiosity is also peaked by the variety of ways in which their neighbors have incorporated amaranth into other systems of production, such as maize and coffee. These observations give each farmer new ideas of how they might be able to better cultivate amaranth given their own family's unique circumstance. It compels them to learn more and to expand their awareness even further, perhaps even beyond the scope of amaranth to include other native plants or entirely different forms of land use. In these ways, the farmers from *Tierra Santa* are certainly improving upon the use of place to achieve instrumental progress. They are addressing, as a group, the elements of the real that facilitate and inhibit amaranth production. They are learning and sharing more effective ways, using the mechanics of place, to control what may or may not take place within their nurseries and their agricultural fields, all of which allows them to be productive within the challenging context of intensive export-oriented coffee

production. These steps, although they facilitate instrumental progress, are ultimately guided by intrinsic judgments which value seeing reality more clearly and creating a more varied and complex world, thus leading these communities ultimately in the direction of intrinsic progress.

The farmers I met in the community of Tierra Santa are characteristic of those farmers for whom agriculture has intrinsic value. This is not the case, however, for all those participating in the Nutrición Nativa project. For those participating farmers who are more heavily involved with coffee or another export oriented crop, and who tend to own larger plots of land, cultivating amaranth is less about sharing knowledge to expand their communities' awareness of possible alternatives to industrialized agriculture, than it is about extracting an additional source of income. Although their motivations are quite different than those for whom amaranth has a deeper meaning, they still must use place to achieve their goals. During the same research period in 2016, I assisted with several technical visits to these larger sites of production, where each plot measured roughly 48x48m, significantly larger than those in poorer communities. At these sites, I observed that farmers either dedicated an entire plot to amaranth, or made room for amaranth by trimming back coffee plants and avocado trees that they were also cultivating. In the cases where an entire plot had been dedicated to amaranth, the reason tended to be that farmers had allowed a portion of their land to lay fallow so that it might recover from previous applications of synthetic fertilizers.

In these instances, farmers have changed the rules of what may or may not take place in their own spaces of agricultural production. Rather than relying on the cultivation of a single crop or the application of synthetic fertilizers, they have consciously altered the rules of place so that an alternative crop may be allowed to flourish with organic inputs. Introducing this new crop, however, has also changed the spatial interactions or “flows” that occur between places. For example, amaranth attracts different species of predators that farmers are not used to controlling.

IMAP will not purchase amaranth from farmers who have sprayed their plants with chemical pesticides, so they must also introduce organic insect repellent, which IMAP provides free of charge. Changing the rules of place has, in turn, changed the spatial flows, and as a result, the landscape or the appearance of place has also changed. What began as a fallow field, or one field of coffee among many fields of coffee, now contributes to a landscape that is more diverse in appearance. In this way, despite these farmers' purely instrumental goals for producing amaranth, they have contributed to the richness and complexity of geographical reality by increasing the number of different places in San Lucas Tolimán. This diversity may only last for so long, however, as amaranth is valued in these places no differently than any other common commodity crop. As Robert Sack would explain, there is no guarantee that places of large scale amaranth production will not become dominant and thus diminish the need for other places, because they are not held to the standards of intrinsic criteria.

Within the Nutrición Nativa project, the mechanics of place are used to achieve progress by changing the rules of what may or may not be allowed in place, compensating for, and even encouraging new spatial interactions, and changing, or even challenging, the meaning of the landscape. From one community or farmer to the next, however, there is no guarantee that the mechanics of place will not be used purely for the attainment of instrumental progress. For the time being, it appears more likely that intrinsic geographic progress is more likely to be brought to fruition from within communities of farmers, such as the group of women in Tierra Santa, and not necessarily from the direction of Nutrición Nativa and IMAP, although this is certainly the direction of progress they wish to promote.

Question 3: Is this Desirable?

Allow me to clarify this question in light of the use of place described above. Is it desirable that one segment of the population participating in Nutrición Nativa appears to be moving their communities in the direction of intrinsic geographic progress, while another other does not? My short answer to this question is an emphatic, no! As Sack would argue, “we make more progress when our instrumental judgements become more like intrinsic ones” (Sack, 2002, p.124). Therefore, because our geographic judgments affect place and in turn reality, it would reason to conclude that we make more progress when our instrumental places become more like intrinsic ones. If something is preventing the Nutrición Nativa project from moving in that direction, it ought to be corrected. To explore this issue further, it would help to know which farmers are faring better in the project. The short period of time that Nutrición Nativa has been in full swing, unfortunately, hinders IMAP’s ability to get a clear picture of where their project is truly going, who is succeeding and who is falling behind. My role as an independent research has been to help piece together part of this picture.

During the month of June in 2016, while assisting with technical site visits and consulting with farmers about their experiences cultivating amaranth for the first time, I began to take note of certain obstacles which may affect a farmer’s ability to succeed in the project. These obstacles, included access to land, the amount of time it takes to clear, prepare and plant a plot of land, as well as the amount of personal start-up costs one must invest relative to their daily income. In consultation with Nutrición Nativa’s program director, I developed a brief questionnaire to gather information about these obstacles. During the month of July and into August I used the questionnaire in seven interviews and two focus groups in the communities of San Martin, Tierra

Santa, Cerro de Oro, Pampojila and Chucumuc. In total, I gathered the following information, found in *Table 1*, from eighteen individual farmers.

Cost and Range of Investment in Amaranth

Table 1: Cost and Range of Investment in Amaranth

<i>Land Invested:</i>	6x8m – 48x48m
<i>Time Invested:</i>	Preparation/Planting: 2 – 5 Days Maintenance: Twice a Month (No Variation)
<i>Capital Invested:</i>	Preparation/Planting: \$27.50 - \$82.50 Maintenance: \$5.50 - \$13.75
<i>Number of producers who paid others to help with land preparation and planting:</i>	4 out of 18
<i>Number of producers who borrowed money:</i>	6 out of 18

What becomes most clear from these findings is that during the project's first year in operation, the amount of land farmers were either willing or able to invest varied greatly, and so too did the amount of time and cost for preparation and planting. Perhaps most interesting is that some farmers reported having paid others to help with labor, while others found it necessary to borrow money in order to cover startup costs. Those farmers who reported investing more time also reported investing more capital in the form of opportunity costs for having spent time away from paid labor. Six of these farmers also reported having borrowed money to cover their families' daily expenses while they went without a portion of their income. Needless to say, this group also represents those who had the least amount of land to invest. In other words, those farmers who bore the most cost, relatively speaking, during the project's first year in operation, also appear to

be those who were the least well off to begin with. Interestingly these farmers also represent those most concerned with cultivating and expanding their knowledge of amaranth in order to develop greater sovereignty over the health, nutrition and food systems of their communities. They represent the segment of the population, in other words, that appears most likely to help Nutrición move in the direction of the real and the good, and yet they are the most disadvantaged.

Question 4: What should be done?

In the thesis I have explored the drawbacks to pursuing a purely rights-based approach to food sovereignty, in so far as rights are assumed to precede an awareness of the good. This approach provides no abstract moral compass for places and projects of food sovereignty to align themselves with, or compare themselves to. This leaves organizations, like IMAP, working in support of food sovereignty, susceptible to a sort of circular self-evaluation, where progress is dependent solely upon the goals of the projects they pursue. In the case of Nutrición Nativa, measures of progress, if left unchecked, might devolve to measures of yield. To break this circular and instrumental form of judgement, projects need a language with which to communicate a deeper meaning of progress. Robert Sack's moral geographic theory offer's the well positioned language of geography to help illuminate and communicate certain qualities of the good. This language, however, is likely not to be adopted by IMAP and the communities they support anytime soon, nor does it need to be. As Sack himself writes, it is possible to "have an intuition about intrinsic progress even if we are not conscious that intrinsic judgements exist" (Sack, 2002, p.124). Part of this intuition comes from what Sack refers to as our 'aesthetic sensitivity' or our ability as moral agents to recognize the real and the good within places and instances of beauty and excellence.

After having spent two summers learning from IMAP and observing their work, it is clear to me that they see the real and the good within the beauty and excellence of natural systems. This

is the philosophy of permaculture. When human systems, such as food and agriculture come to resemble natural systems i.e., by attaining productivity through diversity, then we know we are moving in the right direction. In the same way, when human systems cease to resemble natural systems their imperfections become apparent and eventually repulsive, and we know we are moving in the wrong direction. IMAP applies and promotes these intrinsic judgments within their own headquarters, in their permaculture demonstration gardens and their permaculture design courses. From a geographic perspective, however, this pursuit of the real and the good in natural systems appears contradictory if IMAP simultaneously allow other places, which they benefit from, to progress in seemingly unnatural, or instrumental, directions.

What should be done? In order to achieve real progress, IMAP may continue to pursue the real and the good through elements of permaculture and the beauty and elegance of nature, however, they will also have to contend with our duality as geographic agents – that we not only make progress by expanding our understanding of the world, but also by creating a world that allows us to do so (Sack, 2002). If *Nutrición Nativa* is to make real progress, it must find ways to transform those places of instrumental production into places which foster a deeper and more radical understanding of seed and agriculture, one that inspires us to look beyond the instrumental goals of production to the ever-receding horizon of the real and the good.

Chapter 7: Conclusion

Since beginning my master's program in geography and urban planning, I have been drawn to the question, what makes progress meaningful? This is not necessarily a new or revelatory question depending on the context to which it is applied, but I felt early on in my exploration into food sovereignty, that the meaning of progress, of real progress, had been left, more or less, undefined. In this thesis, I have applied Robert Sack's moral geographic theory to the study of food sovereignty projects, and like any place-making project, we can use intrinsic geographic judgments to help those involved to expand their awareness of reality and the variety and complexity of reality. As Sack explains, these intrinsic geographic criteria of place guide us toward the real and the good, which themselves act as an ever-receding horizon beckoning us toward infinite degrees of progress. Intrinsic geographic judgments value human actions, including the use of our rights, to help one another to see more clearly and to value a more varied and complex world. As indicators of progress, intrinsic geographic judgments are, of course, not only applicable to food sovereignty projects, because every project we pursue takes place, and every place may be imbued with these intrinsic judgements. In this final chapter, I would like to briefly discuss how I might apply intrinsic geographic judgments in my upcoming work as a Rural Extension Agent for the Peace Corps in Guatemala.

As a Rural Extension Agent I will serve for two years in the Western Highlands of Guatemala as a part of the Ministry of Agriculture's national extension system, Sistema Nacional de Extensión Rural (SNER). My job will be to support local extension agents and community promoters to plan, organize and manage the effective delivery of rural extension services. During this time, I will live with a host family in a medium-sized to large rural community, between 3,000

and 40,000 people. I am expected to work with small groups of five to twenty farmers in at least three communities who receive SNER's rural extension support. Similar to my experiences working with IMAP, I will spend the majority of my time consulting and working alongside local community members, community promoters and local extension agents. I am excited to say that given this context, it is required as a part of my in-country pre-service training, to receive tutoring not only in Spanish, but also in a local Mayan language.

An interesting, and perhaps lesser known fact about the Peace Corps is that Peace Corps Volunteers work in conjunction with Feed the Future food security projects. They are one of the many institutions, along with USAID, which reports on Feed the Future indicators. As I demonstrated in Chapter 5, these indicators are largely based on instrumental judgments, where progress is relative to the goal of increasing the number of farmers who apply improved agriculture technologies, or the number of hectares under improved technologies. This is not to say that a project which supports the adoption of improved technologies cannot also be guided by intrinsic judgments. In Senegal, Feed the Future has funded partnerships between local seed labs and private seed processing centers to help train local farmers as certified seed producers (Progress Report, 2016). It is unclear what exactly the motivation is to create such partnerships between these two places. The reason may be based on intrinsic judgements, because this partnership would lead to a heightened awareness of the geographic relationships between community farmers and private businesses. The reason, however, might also be based on instrumental judgments, because this partnership would give private companies greater control over the certified seed farmers buy and cultivate, thus fulfilling a Feed the Future indicator, while also securing the interests of private business to invest in the food security sector.

As a Peace Corps Volunteer, I will be asked to serve not only the communities in which I will live and work, but also the larger food security effort on the part of the Ministry of Agriculture's national extension system. Therefore, I may find that I am not in a position to question the indicators of progress that I will be asked to monitor, evaluate and report on for the various projects that I will serve and oversee. This all may be prove to be the case, however this does not change the fact that in the same region of the country local indigenous organizations, including IMAP, are rapidly expanding the production and normalization of Amaranth in local communities and diets. In fact, near the end of my research period in 2016, I visited another indigenous organization, *Asociación de Mujeres Mayas Oxlojuj E*, which is a women's cooperative that has specialized in the cultivation and processing of amaranth for several years. Local organizations, such as Oxlojuj E, IMAP, as well as several other regional seed banks in the Western Highlands, represent a network of places where seed and agriculture have intrinsic value. Their projects are based predominantly on intrinsic judgments which value seeing clearly the relationship between agriculture and natural systems as well the security that comes from preserving and promoting natural diversity.

As a Peace Corps Volunteer, I may not be able to create a new trajectory for the services and programs that I will be supporting, however, as a geographic agent, I believe it is my moral obligation, my *compromiso moral*, to help those within the Peace Corps, as well as those from local organizations, like IMAP, to see as clearly as possible how the other operates, the sort of progress they strive to achieve, and how they could possibly work better together.

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